

LIBRARY

COUNTY COUNCIL OF  
CUMBERLAND

ANNUAL REPORT

ON THE

HEALTH SERVICES  
OF THE COUNTY

FOR THE YEAR 1937

KENNETH FRASER,

M.D., F.R.S.E., D.P.H., D.T.M.,  
COUNTY MEDICAL OFFICER



COUNTY COUNCIL OF  
CUMBERLAND

---

ANNUAL REPORT

ON THE

HEALTH SERVICES  
OF THE COUNTY

FOR THE YEAR 1937

---

KENNETH FRASER,

M.D., F.R.S.E., D.P.H., D.T.M.,  
COUNTY MEDICAL OFFICER

# INDEX

	Page
Air Raid Precautions .. .. .	14
Ambulance Facilities .. .. .	25
Appendix " A "—Annual Report of Venereal Diseases Officer .. .. .	77
„ " B "—Annual Report of Vaccination Officer .. .. .	85
„ " C "—Annual Report of County Veterinary Officer .. .. .	89
„ " D "—Annual Report of County Analyst .. .. .	101
„ " E "—Vital Statistics—1937 .. .. .	107
Area .. .. .	20
Blindness, Prevention of .. .. .	64
Cancer .. .. .	64
Clinics and Treatment Centres .. .. .	16, 27
Dental Treatment .. .. .	51
Health Visiting .. .. .	40
Hospital Provision .. .. .	12 (insert)
Housing .. .. .	54
Infant Life Protection .. .. .	42
Infantile Mortality .. .. .	23
Infectious Diseases .. .. .	60
Isolation Hospitals .. .. .	12 (insert)
Laboratory Facilities .. .. .	25
Maternity and Child Welfare .. .. .	33
Maternal Mortality .. .. .	9, 33
Mental Defectives—Institutional Provision for .. .. .	32
Midwives .. .. .	42
Midwives Act, 1936 .. .. .	45
Milk Supply .. .. .	14, 57
Nursing in the Home .. .. .	26
Ophthalmia Neonatorum .. .. .	64
Orthopaedic Treatment .. .. .	48
Public Assistance Medical Service .. .. .	30
Public Health Officers of the Authority .. .. .	4
Puerperal Sepsis .. .. .	41
Special Reports—List of .. .. .	19
Tuberculosis .. .. .	12 (insert), 66
Vital Statistics .. .. .	9, 20
Water Supplies and Sewerage .. .. .	54

## **PUBLIC HEALTH AND HOUSING COMMITTEE.**

### *Chairman.*

Alderman THE LADY MABEL HOWARD, C.B.E.

### *Vice-Chairman.*

Alderman J. J. ADAMS.

### *Aldermen.*

The Rev. Canon SUTTON, C.B.E. (Chairman of the County Council)  
ex-officio.

CROZIER, J. W. CUSACK, J. M. DYKES, Col. H. B., D.S.O. FLYNN, J.  
RIGG, R. ROBERTS, C. H. (Vice-Chairman of the County Council)

### *Councillors.*

APPLEBY, Mrs. E.

ARMSTRONG, I.

BEATON, T.

CAIN, Mrs. E. G.

CARR, F. A.

CASSON, L.

DOBINSON, W.

DOUGLAS, J.

FERGUSON, G.

GRAHAM, C. W.

HODGSON C. L. C.

KIRKBRIDE, T.

MOORE, W. M.

KNOX, J. H.

ROWE, S.

STEPHENSON, T.

WILSON, DANIEL

### *Cumberland Insurance Committee Representatives.*

COURT BROWN, Mrs.

CREASY, J.

LAMB, R. P.

WANDLESS, W. H.

### *Nominated by the British Medical Association.*

BARTON, E. B., M.B., Ch. B.

---

## **MIDWIVES, MATERNITY AND CHILD WELFARE SUB-COMMITTEE.**

### *Chairman.*

Alderman J. J. ADAMS.

### *Aldermen.*

CUSACK, J. M.

DYKES, Col. H. B., D.S.O.

HOWARD, THE LADY MABEL, C.B.E.

RIGG, R.

ROBERTS, C. H.

SUTTON, The Rev. Canon, C.B.E. (ex-officio)

### *Councillors.*

CARR, F. A.

DOBINSON, W.

FERGUSON, G.

KIRKBRIDE, T.

KNOX, J. H.

STEPHENSON, T.

### *External Members.*

FOX, Mrs. E. J.

HARRIS, Mrs. J.

WALKER, Miss C.

## PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

---

### A. MEDICAL OFFICERS.

#### *Whole-Time*

##### *County Medical Officer—*

Kenneth Fraser, M.D., F.R.S.E., D.P.H., D.T.M.

##### *Deputy County Medical Officer—*

Mark S. Fraser, M.D., D.P.H., F.R.C.S.E.

##### *Assistant County Medical Officers—*

A. C. B. McMurtrie, M.C., M.D., F.R.C.S.E., D.P.H.,  
Venereal Diseases Officer.

Arthur H. Towers, M.B., Ch.B., D.P.H., B.Hy.

Kenmure J. Thomson, M.B., Ch.B.

#### *Part-Time*

H. C. Simpson, L.M.S.S.A., D.P.H.

Also Medical Officer of Health for Wigton R.D.C.

I. Spedding Jones, M.R.C.S., L.R.C.P., D.P.H.

Also Medical Officer of Health for Millom R.D.C.

Frederick W. Gavin, M.D., D.P.H. Also Medical Officer of  
Health for Penrith R.D.C.

C. A. Mason, M.B., Ch.B., D.P.H.

Also Medical Officer of Health for Maryport U.D.C.,  
Cockermouth U.D.C., and Cockermouth R.D.C.

R. W. Macpherson, M.D., D.P.H.

Also Medical Officer of Health for Workington Borough.

W. S. Dalgetty, M.B., Ch.B.

Also Medical Officer of Health for Alston R.D.C.

### B. DENTAL OFFICERS.

#### *Senior Dental Officer—*

F. E. Gillieron, H.D.D., L.D.S. (Resigned 31/8/37).

A. C. S. Martin, L.D.S. Appointed 15/9/37.

#### *Assistant Dental Officers—*

Miss Jean Miller, L.D.S.

A. E. Liebow, L.D.S.

D. C. Lamond, L.D.S.

H. Christopher, L.D.S.

**\*C. SUPERVISOR OF MIDWIVES.**

Miss C. F. Illingworth

**\*D ASSISTANT SUPERVISOR OF MIDWIVES,**

Miss E. E. Jackson.

**\*E. HEALTH VISITORS AND INFANT LIFE PROTECTION VISITORS.**

Miss A. B. King

Miss J. Reid

Miss G. R. P. Brownlie

Miss E. Johnston

Miss E. M. Lawson

Miss J. N. Marchbank

Miss R. J. V. Hind

Miss M. E. Prescott

Miss D. Donkin (Resigned).

Miss M. A. Pope, (Appointed 1st November, 1937).

Miss C. B. Ramsey. (Appointed 1st December, 1937).

\* All the above are fully-trained Nurses with the C.M.B Certificate. In addition Miss Illingworth, Miss Jackson, Miss Marchbank, Miss Pope and Miss Ramsey hold the Health Visitor's Certificate.

**F. DENTAL NURSES.**

Miss W. Ferguson

Miss M. J. Kelly

Miss B. H. Crellin

Miss E. Beaton.

Miss D. C. Didsbury. (Appointed January 11th, 1937.

Resigned December 18th, 1937).

**G. AFTER-CARE SISTER, ORTHOPAEDICS.**

Miss F. D. Nelson

**H. COUNTY COUNCIL MIDWIFE.**

Mrs. C. Benn

**I. PART-TIME NURSE, VENEREAL DISEASES.**

Mrs. M. S. Parker.

**J. PART-TIME ORDERLY, VENEREAL DISEASES.**

G. H. Longstaff

**K. ADMINISTRATIVE OFFICER.**

W. Butcher. Also Vaccination Officer.

**L. COUNTY ANALYST.**

C. J. H. Stock, B.Sc., F.I.C.

**M. COUNTY VETERINARY OFFICER.**

Robert Simpson, F.R.C.V.S., D.V.S.M.

*Assistant Veterinary Officers—*

John Cameron, M.R.C.V.S., D.V.S.M. B.Sc.

John Reid, M.R.C.V.S., D.V.S.M.

J. C. Bennison, M.R.C.V.S., D.V.S.M.

**N. CONSULTANTS.***Diseases of the Eye—*

J. A. Ross, M.A., M.B., Ch.B.

A. W. Patton, M.R.C.S., L.R.C.P., D.O.M.S.

*Diseases of the Ear, Nose, and Throat—*

E. Craig Dunlop, M.B., B.S., F.R.C.S., Ed.

Robert S. Venters, M.B., Ch.B., F.R.C.S., Ed.

*Radiologists—*

R. Connell, B.A., M.B., B.Ch., B.A.O., F.B.A.R.

R. Fawcitt, M.D., Ch.B., F.B.A.R.

*Consultant in Obstetrics and Gynaecology—*

(Vacant).

*Consultants in Orthopaedics—*

Harry Platt, F.R.C.S., Eng.

E. S. Brentnall, F.R.C.S., Ed.

*Anaesthetist—*

Duncan Cameron, M.D., F.R.F.P.S.

*Bacteriological Consultant—*

J. Steven Faulds, M.B., Ch. B., Ed., F.R.F.P.S., Glas.

---



## PUBLIC VACCINATORS.

<i>District.</i>	<i>Name and Address.</i>
Alston-with-Garrigill	..Dr. W. S. Dalgetty, Carson Holm, Alston.
Longtown (Low)	..Dr. G. H. Thomson, Dunvegan, Longtown
Longtown (High)	..do. do.
Brampton ..	..Dr. L. D. Nelson, Brampton.
Penrith .. ..	..Dr. A. S. Mactavish, Fernleigh, Penrith.
Langwathby ..	..Dr. J. Sachs, Birbeck House, Penrith.
Greystoke ..	..Dr. J. Mellor, Motherby Road, Greystoke.
Kirkoswald (No. 1)	..Dr. H. J. Robinson, High College, Kirkoswald.
Kirkoswald (No. 2)	..Dr. A. G. MacGillivray, High Hesket.
Burgh-by-Sands	..Dr. A. P. Walters, Burgh-by-Sands.
Dalston and Orton	..Dr. C. G. Shearer, The Green, Dalston
Cockermouth ..	..Dr. G. Govan, Challoner House, Cockermouth.
Maryport ..	..Dr. R. L. Clark, Fleming Square, Maryport.
Workington ..	..Dr. I. Fletcher, Beechwood, John Street, Workington.
Keswick .. ..	..Dr. J. McKenzie, Riverholm, Keswick
Wigton .. ..	..Dr. E. M. Dolan, The Limes, Wigton.
Aspatria .. ..	..Dr. A. K. Rankin, Brandraw Mount, Aspatria.
Ireby and Caldbeck	..Dr. I. Macquarrie, Brandraw Mount, Aspatria.
Bowness .. ..	..Dr. A. P. Youngson, Hilcote, Kirkbride.
Holme Abbey ..	..Dr. E. B. Barton, 4 Park Terrace, Silloth.
Cleator .. ..	..Dr. W. S. Eaton, Montreal House, Cleator Moor.
Egremont ..	..Dr. B. Mitchell, Main Street, Egremont.
Gosforth ..	..Dr. R. T. Richmond, Keldgreen, Seascale.
Harrington ..	..Dr. G. R. Cullin, 19 Church Road, Harrington.
Lamplugh & Frizington	..Dr. L. Gilmore, 4 Scotch Street, Whitehaven.
Muncaster & Bootle	..Dr. D. R. Gray, Lane House, Bootle.
Millom .. ..	..Dr. R. Todd, 82 Lapstone Road, Millom.
Whitehaven ..	..Dr. T. S. L. Jones, 30 Queen Street, Whitehaven.
Wetheral .. ..	..Dr. W. M. Hetherington, The Plains, Wetheral.

## INSTITUTIONAL MEDICAL OFFICERS.

Dr. A. S. Mactavish	.. Penrith Institution
Dr. E. M. Dolan ..	.. Wigton Institution
Dr. E. H. Ablett ..	.. Whitehaven Institution
Dr. W. M. Hetherington	.. Englethwaite Boys' Home
Dr. A. S. Mactavish	.. Lark Hall, Penrith

**ADDITIONAL OFFICERS.***Medical Officers of Health of County Districts as on 31st December, 1937***URBAN.**

Workington ..	..	..	..	Dr. R. W. Macpherson
Whitehaven ..	..	..	..	Dr. J. W. Innes
Cockermouth ..	..	..	..	Dr. C. A. Mason
Keswick ..	..	..	..	Dr. J. Norman (Temporary)
Maryport ..	..	..	..	Dr. C. A. Mason
Penrith ..	..	..	..	Dr. F. W. Gavin

**RURAL.**

Alston ..	..	..	..	Dr. W. S. Dalgetty
Border ..	..	..	..	Dr. J. Lamberton
Cockermouth ..	..	..	..	Dr. C. A. Mason
Ennerdale ..	..	..	..	Dr. J. W. Innes
Millom ..	..	..	..	Dr. I. S. Jones
Penrith ..	..	..	..	Dr. F. W. Gavin
Wigton ..	..	..	..	Dr. H. C. Simpson

---

## TO THE CUMBERLAND COUNTY COUNCIL.

---

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I beg to present my Sixth Annual Report on the Health Services of the County.

The Report is prepared in accordance with Circular 1,561 of the Ministry of Health.

### VITAL STATISTICS.

The vital statistics for the year are worth careful study. In some respects they are definitely encouraging, and in others they are definitely the reverse.

Last year I drew attention to the alarming drop in the population. The population for 1937, which is of course, *estimated*, shows a further drop of approximately 3,000 from 199,590 to 196,080. The Birth Rate is the merest shade higher at 16 per thousand of the population. The Death-rate is considerably higher than for the previous year, the Crude Death Rate being 14.4 per thousand of the population against 12.9 for 1936, and the Adjusted Death Rate 13.8 against 12.4. In round figures there were 232 additional deaths on a lower population.

Some part of this is explainable by a rise in the deaths from influenza from 26 in 1936 to 124 in 1937, but there was a rise of 53 in the deaths from heart disease, a rise of 29 in the deaths from pneumonia and bronchitis, and a rise of 11 in deaths from pulmonary tuberculosis, and generally there were small increases under most headings. The rise in the deaths from pulmonary tuberculosis is particularly regrettable because with proper facilities deaths under this heading should be falling and not rising. The Infantile Mortality Rate rose from 58 in 1936 to 61 in 1937.

These figures are definitely disconcerting. Whether they have any relation to the rough and tumble of economic distress in this area I am unable to say, but they do seem to indicate that there must be no slowing up in our Health Services.

There is one figure in the vital statistics which, on the other hand, is extremely satisfactory. The number of Maternal Deaths is returned as 4 (sepsis 1, other puerperal

causes 3). The classification of a death as maternal or otherwise is not always easy, and is a matter for the expert medical statistician. Pregnancy and labour may often be complicated by other circumstances which of themselves might have led to a fatal result. For example, pregnancy may be complicated with tuberculosis in an advanced stage, and tuberculosis may be the obvious cause of death, even though death may coincide more or less with the confinement of the patient. But there are other cases where a decision is not so easy.

Personally, from local knowledge of the facts, I am of the opinion that at least five deaths against the four classified by the Registrar General as Maternal Deaths were directly attributable to pregnancy or labour, and I think two others were debatable. I also think that two deaths of the total were due to sepsis as against one so classified, but whether the true figure be four or slightly higher, the result is a vast improvement on preceding years, and is by a long way the lowest figure ever recorded for this area.

Compared with an *average* of 17 deaths for the previous six years, we have changed from being one of the highest areas in respect of Maternal Mortality in the country to, I imagine, one of the lowest. While not wishing to be unduly optimistic on one year's figures, yet it is fair to point out that the figures have been steadily falling for the past five years ; the number of deaths being as under :—

1933	..	..	..	..	..	23
1934	..	..	..	..	..	17
1935	..	..	..	..	..	14
1936	..	..	..	..	..	13
1937	..	..	..	..	..	4

During the first five months of 1938, there has only been one maternal death. One cannot but feel that the strenuous efforts made by the County Council in this matter are now bearing fruit. I think the factors at work have been increasing co-operation between general practitioners in this area and this Department, an increasing tendency to remove to hospital cases in which difficulty or danger is anticipated, improved ambulance transport, and the extension of extra nourishment grants.

Four hundred additional ante-natal examinations have been made by general practitioners, and 1,000 additional ante-natal visits have been paid by health visitors and district

nurses, and it is my duty to acknowledge also the valuable help given to us by the various specialists to whom cases have been referred—in fact the whole thing has been a good example of team work, which, in my opinion, augurs well for the future.

If there is one person more than another to whose labours this excellent result is due it is, in my judgment, the Administrative Officer—Mr. Butcher—who has, with conspicuous ability, and often at very great personal inconvenience, assisted the medical profession in the area from the administrative angle in dealing with obstetrical emergencies in all parts of the County, and at all hours of the day and night as these have arisen. Letters and messages of thanks which I have received from general practitioners in this connection leave me in no doubt on this point.

### **PROGRESS.**

Twelve months ago I received the instructions of the County Health Committee to include in future Annual Reports a statement of the progress made in our various schemes during the year. These instructions, I imagine, arose out of the somewhat pessimistic view I took at the time of the progress we had made or were making in these matters. Even the most optimistic can hardly claim that we have made much further progress during the past year. A very large amount of time and labour has been devoted to the various schemes, but the net progress, even on paper, has not amounted to very much.

The reasons, I imagine, chiefly are that in a county area, and particularly in a county area hampered by economic restrictions, progress is necessarily slow. Yet it was the Local Government Act of 1929 which initiated the investigation into the general hospital problem of this and other areas, and the first survey report on this matter was issued in the early spring of 1931. The same Act raised the question of infectious hospital accommodation, and the first report was issued in the early spring of 1932. The proposal to erect a new county sanatorium has been under consideration since 1935.

The development of these various schemes in this area will be dependent on financial assistance from the Commissioner for the Special Areas, and it cannot be expected that assistance from this source will be available indefinitely.



Recent national and international developments, and a realisation of the other commitments of the County Council have done nothing to ease the position, and money for any scheme—however inherently desirable—will be more difficult to obtain in the future than it has been in the immediate past. *I only hope we have not “missed the boat.”*

The actual position with regard to the various schemes is shown on the insert :—

### COMMITMENTS.

The impending capital and maintenance commitments of the County Council have recently been much in the forefront, and a special sub-committee has been appointed to consider the whole problem. It has therefore occurred to me that it would be of interest to endeavour to obtain some idea of the ultimate meaning of the projected schemes of the Health Department in terms of finance.

I have endeavoured from such information as I have, to arrive at the approximate annual charge on these schemes. I have included in the calculations interest and sinking fund charges on capital and maintenance costs of beds, etc., and other charges, and I have allowed—where these apply and are known—for grants from the Commissioner for the Special Areas. A good deal of all this is necessarily *very* approximate, but it seems to me that extended over a period of years the total annual charges on these developments might rise to a maximum figure of some £17,500 a year. As there will be certain off-sets the rate increase might, it seems to me, when it reaches its peak figure, be somewhere between 5d. and 5½d.

*What would we get for this expenditure?*

We would have :—

- (1) a modern sanatorium.
- (2) a base hospital worthy of the name.
- (3) a modern hospital at Whitehaven.
- (4) extended hospitals at Workington and Maryport.
- (5) replaced the worst of our present overcrowded and unsuitable treatment centres and clinics with modern buildings.
- (6) provided adequate maternity beds for the whole area, and adequate beds for the treatment of diseases of women.

<i>Development of the Cumberland Infirmary as a Base Hospital for the Area.</i>	<i>Whitehaven and West Cumberland Hospital.</i>	<i>Workington Infirmary.</i>	<i>Maryport Cottage Hospital.</i>	<i>County Sanatorium.</i>	<i>Clinics and Treatment Centres.</i>	<i>Ambulance Provision.</i>	<i>Review of Infectious Hospital Accommodation.</i>	<i>Consultant in Gynaecology and Obstetrics.</i>
Plans are now completed and have been lodged with the Ministry of Health. An application has been made to the Commissioner for financial assistance towards the cost of the scheme, estimated at some £210,000.	The proposal to reconstruct the existing buildings has been abandoned, and a decision to build a new hospital has been taken. A site has been obtained. The Commissioner for the Special Areas has notified his contribution towards the scheme. The County Council and the Whitehaven Town Council have intimated their capital contributions towards the scheme. The total estimated cost of the scheme is, I understand, to be in the region of £150,000	The development of the Out-Patient and X-Ray Departments which is being undertaken by the Hospital themselves without outside assistance is nearly completed. Plans have been prepared for the extension of the Maternity Department. The County Council have suggested that plans be prepared for certain other developments to be made, if possible, concurrently with the extension of the Maternity Unit.	The extensions at this Hospital are actually in progress.	The area in which it is suggested the Sanatorium should be built has been selected and notified to the County Council. Difficulties over the question of purchase of part of the land concerned, and certain difficulties with regard to sewage disposal have arisen, and are under consideration.	The approved clinic in Carlisle will open in the early summer of 1938. A site has been secured for a clinic at Aspatria, and plans have been approved by the appropriate Committee, subject to the approval of the County Council and the Government Departments concerned.	Ambulances have been provided for the Cocker mouth Urban and Rural Districts, the Wigton Rural District, and the Brampton Rural District, and the whole of the county is now provided with ambulance facilities, although only a proportion of the ambulance authorities concerned have agreed to co-operate in the county scheme. See page 25.	The County Council Scheme under Section 63 of the Local Government Act, 1929, reviewing the existing accommodation, and making certain new proposals, has been sent to the Ministry of Health. Certain objections have been lodged against the Scheme.	This appointment was advertised towards the end of the year, and at the time of writing the name of one applicant has been recommended to the three constituent bodies for appointment.





- (7) greatly extended facilities for the treatment of cancer.
- (8) an organised scheme for the treatment of fractures, and we would have made many other provisions in the interests of the health of the community.

All these things are desirable—there is probably no argument on this point.

When, where and how, money can be found to carry these things through is naturally not for me to say, but there are two points in dealing with future commitments, which are perhaps peculiar to the proposals of the Health Department. While I give these points, I appreciate that the health services would naturally have to share in any restrictions which might be placed on expanding expenditure.

The first point is that several of the schemes are to be the subject of substantial grants from the Commissioner for Special Areas. It has frequently been hinted—with what authority I do not know—that this department of the nation's organisation will not be a permanency, and it has often been hinted that its existence will not be unduly prolonged. If that is so, then clearly there is a *time limit* for the consideration of these health department schemes, because of one thing I feel sure, and that is that without extensive assistance from the funds of the Commissioner these schemes *will never materialise at all*.

The second point is that up to the present the Health Department has only shared to a very meagre extent in the capital expenditure of the County Council. During the last twenty-five years I do not think that the total *capital* expenditure on the health services has exceeded £5,000, and, in fact, our possessions to-day are represented by two or three private houses converted into treatment centres and clinics for the work of which they are for the most part totally unsuitable.

### INCREASED RESPONSIBILITIES.

The year has been notable for certain important additions to the responsibilities of this department. These are chiefly the medical side of Air Raid Precautions; the transfer—arising out of the Agricultural Act, 1937—to the Health Department of the organisation and supervision—in conjunction with Local Sanitary Authorities—of milk sampling throughout the county; and, finally, the administration of the Midwives Act.

On paper these things perhaps do not look very much, but each of them individually means a substantial addition to our work. Milk sampling alone, for example, means dealing with some 2,000 reports annually, and any necessary action arising out of unsatisfactory reports (in conjunction with the Local Sanitary Authorities and the Officers of the Ministry of Agriculture), and action in respect of the issue of licences.

Emergency calls, too, have markedly increased recently. Such calls mostly concern obstetrical emergencies, cases of infantile paralysis, ophthalmia, and other urgent eye conditions, mastoids and other ear, nose and throat conditions. Many of the cases have been extraordinarily complicated, and have presented problems of extreme difficulty, for example, where obstetrical or other emergencies of the nature indicated have been complicated by the fact that the patients have been suffering from or contacts of various infectious diseases. The Administrative Officer and myself are now dealing with a yearly average of many hundreds of telephone calls outside of office hours. These additional responsibilities have not been accompanied by any increase of staff, and the pressure, particularly of emergency work, has naturally been very heavy.

#### AIR RAID PRECAUTIONS.

No substantial progress has been made in this matter up to the end of the year, although a considerable amount of preliminary work has been undertaken. A course of instruction for medical officers in the organisation of the medical side of Air Raid Precautions was held in November, and it is unfortunate that I was not authorised to attend this course.

#### MILK SAMPLING.

I find some difficulty, in taking over my share of responsibility in this matter, in understanding the national trend of milk sampling. So far as I can ascertain, sampling is, *in the main*, confined to herds producing Accredited Milk—in this County approximately 300—to herds producing Tuberculin Tested Milk—approximately 50—and to certain herds included in neither of the above categories supplying milk to schools. In these matters the County Council is directly concerned in that licences for the production of Tuberculin Tested or Accredited Milk are issued by the County Council, and in that the County Medical Officer, jointly with the local Medical Officers of Health, is responsible

for the approval of school milk supplies. In addition to this sampling by arrangement between the County Council and the Local Sanitary Authorities, there is a variable quota of milk samples which each Local Sanitary Authority undertakes during the year from non-graded herds. These numbers are *relatively* small.

The total number of samples allotted to all the Sanitary Authorities in the County under the quota amounts to some 800 per annum. These samples, as I have said, are at the discretion of the Local Sanitary Authorities, and are taken from producers whose herds are neither Accredited nor Tuberculin Tested. There are 4,000 registered producers in the County, and, on an estimate, 1,000 who are not registered, but should be. Deducting the 350 Accredited and Tuberculin Tested herds, and adding another 50, which is an outside figure for school milk producers falling in neither of these categories, there appear to remain something like 4,500 herds among whom is allotted, by agreement, a quota of milk samples amounting to 800.

Accredited herds are sampled four times a year, and Tuberculin Tested herds anything up to once a month, including six-monthly tests for tubercle. School milk supplies are sampled three times a year. It is clear, even admitting that a fair proportion of the 4,500 non-classified producers produce mainly butter or some other milk product, that the figures can only mean that these herds are only being sampled something like once every three years—if that. It is, of course, understood that a very large amount of this non-classified milk is dispatched in bulk, and is ultimately pasteurised before consumption. This will hold good in respect of milk sold to the big dairy companies outside the county, but I cannot help feeling that a not inappreciable quantity of this milk must be consumed unpasteurised inside the county. The Medical Officer of Health of the Wigton Rural District recently drew the attention of his Council to this matter.

I am not for a moment suggesting that this position is peculiar to this area. I have little doubt that substantially the same position exists all over the country. What seems to me so extraordinary is that we are nationally devoting over two-thirds of our sampling activities to the close supervision of the relatively small number of producers of high grade milk, and devoting less than one-third of these activities to the enormously greater (in this county ten times greater)

number of producers of unclassified milk, the safety of the consumption of which is dependent upon whether it is pasteurised or not.

#### **THE MIDWIVES ACT, 1936.**

The administration of this Act is proving very difficult. The matter is dealt with in detail elsewhere in this report. We have experienced great difficulty in obtaining the necessary midwives to comply with our statutory obligations, and the margin of staff is so small that it has been very difficult to deal with illness and other emergencies, and with the question of post-graduate training. The co-operation of the Cumberland Nursing Association, and of the affiliated district nursing associations is gratefully acknowledged, but even with their full co-operation the administrative work in dealing with matters such as salaries, off-duty time, post-graduate work, provision of motor transport, etc., has been very heavy.

#### **CONSULTANT IN GYNAECOLOGY AND OBSTETRICS.**

At the time of writing, a consultant in these matters has been recommended for appointment, and it is anticipated that he will take up his duties about mid-summer.

#### **STANDARD CLINICS AND TREATMENT CENTRES.**

Reference has been made in the report on the School Medical Service to the fact that the County Architect has produced—after consultation with Officers of this Department—a very satisfactory plan for what may be described as a “Standard Clinic,” which has been approved by the appropriate committee and will, subject to the approval of the County Council and the Government Departments concerned, shortly, I hope, be erected at Aspatria. I hope that a policy of replacing our present very unsatisfactory clinic premises in certain areas by these standard clinics, planned in accordance with modern requirements, may be adopted by the County Council.

#### **THE PUBLIC ASSISTANCE MEDICAL SERVICE.**

Reference is made elsewhere in this report to the inauguration of the system of free choice of doctor by the sick poor. This progressive step has been made possible by the co-operation and good will of the medical practitioners of the areas concerned.



## **MENTAL ILLNESS.**

Recently extensive proposals for the provision of better accommodation at Garlands Mental Hospital have been before the County Council. This is a matter, of course, with which I am not concerned, but bearing in mind the now recognised association between certain forms of mental illness and physical conditions, it does seem to me to be regrettable that the proposals, so far as I understand them, leave the mental hospital isolated from the base hospital.

In the proposals for the extensions of the Cumberland Infirmary as the Base hospital, there is no provision for the investigation and treatment of early mental cases ; there are no beds allocated for this purpose, and there is no proposal or suggestion for an out-patient clinic.

I believe that some years ago negotiations for the establishment of an out-patient mental clinic at the Cumberland Infirmary took place, but nothing has materialised. The modern trend of investigation of certain types of early mental cases has taken the form, particularly in certain areas, of team work in a general hospital where the services of specialists in general medicine and surgery, gynaecology, radiology, eye, ear, nose and throat work, and so on, are available for frequent consultation. This team work by discovering physical causes for mental deterioration and providing appropriate treatment therefor has proved remarkably successful in returning to economic life persons who otherwise might have become permanently mentally incapacitated.

The part which could be played by the health services of a Local Authority (under the Mental Treatment Act, 1930), in assistance which might be rendered by the Local Authority in establishing liaison with specialists on the staffs of general hospitals has never, as I have previously pointed out, received any serious consideration in this area. I feel sure that this is a mistake, and I feel sure that in time to come this policy will require re-adjustment.

## **INFANTILE PARALYSIS.**

Details are given elsewhere in this report of the small epidemic of this disease which occurred during the year. Although the epidemic was small, it is always necessary to remember the potentialities which lie behind even the smallest epidemic of this kind, and the closest attention was paid to administrative measures and the treatment of patients concerned.

### NATIONAL HEALTH PUBLICITY CAMPAIGN.

During the autumn and continuing into the early spring of 1938, the National Health Publicity Campaign planned by the Ministry of Health took place. A very large volume of literature was distributed throughout the area, and the local press gave most valuable co-operation in the matter. One immediate result was a flood of applications to this Department for lectures on health subjects, the number of applications being far in excess of the available time of the medical staff.

In conclusion, I have once again to acknowledge the help and encouragement I have received from the Chairman and Members of the Health Committee, and also to acknowledge once more the loyalty and support of all members of my staff.

I am,

Your obedient Servant,

KENNETH FRASER,

*County Medical Officer.*

THE COURTS,

CARLISLE,

*May, 1938.*

### SPECIAL REPORTS.

Medical Officers are required by Circular 1,561 to include in their Annual Reports a summary of special reports made during the year. The most important of the special reports which have recently been issued are set out below :—

<b>WHITEHAVEN JUNIOR INSTRUCTIONAL CENTRE</b>	..	..A report on the physical condition of the boys at this Centre.
<b>MIDWIVES ACT, 1936</b>	..	..Various reports dealing with the appointment of midwives, post graduate training, etc.
<b>MATERNITY BEDS.</b>	..	..A report drawing attention to the inadequacy of our maternity bed provision.
<b>INFANTILE PARALYSIS</b>	..	..A report on the incidence of this disease, and on the measures taken to deal with the same.
<b>MATERNAL MORTALITY</b>	..	..A report arising out of Circulars 1,620 and 1,622 issued by the Ministry of Health.
<b>TREATMENT OF FRACTURES</b>	..	..A report on general principles making preliminary suggestions for a County Scheme.
<b>SALVAGE OF CARCASSES</b>	..	..A joint report with the County Veterinary Officer on the salvage of tuberculous carcasses.
<b>WHITEHAVEN AND WEST CUMBERLAND HOSPITAL</b>	..	..Memorandum on the suggested size of the maternity unit.

## STATISTICAL AND SOCIAL CONDITION OF THE AREA

The area of the Administrative County as given in the Census Returns of 1931, is 968,598 acres. (Urban 62,133 ; Rural 906,465).

### POPULATION.

	At 1931 Census.	Estimated by Registrar-General, Mid. 1937.
Urban Districts ..	114,459	79,780
Rural Districts ..	91,331	116,300
Administrative County ..	205,790	196,080

### RATEABLE VALUE AND SUM REPRESENTED BY A PENNY RATE.

The rateable value of the County at 1st April, 1937, was £824,346. The estimated product of a penny rate, 1937-38, was £3,163.

### EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1937.

#### LIVE BIRTHS.

	Total Births.	Males.	Females.
Legitimate ..	2,936	1,512	1,424
Illegitimate ..	195	109	86
Total Births ..	3,131	1,621	1,510

Birth Rate per 1,000 population—16.0.

#### STILL-BIRTHS.

	Total Still-Births.	Males.	Females.
Legitimate ..	107	60	47
Illegitimate ..	4	4	0
Total Births ..	111	64	47

Rate of Still-Births per 1000 total births is 34.

#### DEATHS.

Total Deaths.	Males.	Females
2,806 ..	1,485 ..	1,321.

Crude Death Rate per 1,000 population—14.4.

Adjusted Death Rate      do.      13.8.

(using the area comparability factor supplied by the Registrar General)

### DEATHS FROM DISEASES AND ACCIDENTS OF PREGNANCY AND

#### CHILDBIRTH.

From Sepsis ..	1
Other Causes ..	3

Maternal Death Rate per 1,000 Total Births—1.23.



# DEATH RATE OF INFANTS UNDER ONE YEAR OF AGE.

All Infants per 1,000 Live Births	..	..	61.32
Legitimate Infants per 1,000 Legitimate Live Births	..	..	61.31
Illegitimate Infants per 1,000 illegitimate Live Births	..	..	61.53
<u>DEATHS FROM CANCER (ALL AGES)</u>	..	..	309
<u>DEATHS FROM MEASLES (ALL AGES)</u>	..	..	8
<u>DEATHS FROM WHOOPING COUGH (ALL AGES)</u>	..	..	6
<u>DEATHS FROM DIARRHŒA (UNDER 2 YEARS)</u>	..	..	16

The 3,131 live births were distributed among the Urban and Rural Districts, as follows :—

## BIRTHS, 1937.

URBAN DISTRICTS	Total Births.	Legitimate.	Illegitimate.	Birth Rate.
Cockermouth .. .. .	68	65	3	14.1
Keswick .. .. .	53	51	2	11.9
Maryport .. .. .	194	182	12	16.9
Penrith .. .. .	156	146	10	16.8
Whitehaven .. .. .	411	388	23	18.4
Workington .. .. .	467	448	19	17.1
<i>Aggregate of Urban Districts</i> .. .. .	1349	1280	69	16.9
RURAL DISTRICTS				
Alston .. .. .	45	41	4	18.8
Border .. .. .	362	331	31	14.1
Cockermouth .. .. .	272	251	21	15.3
Ennerdale .. .. .	443	421	22	16.6
Millom .. .. .	183	168	15	15.8
Penrith .. .. .	138	131	7	12.2
Wigton .. .. .	339	313	26	15.7
<i>Aggregate of Rural Districts</i> .. .. .	1782	1656	126	15.3

The 2,806 deaths were distributed among the Urban and Rural Districts, as follows :—

### DEATHS, 1937.

URBAN DISTRICT	Total.	Males.	Females.	Crude Death Rate	Adjusted Death Rate
Cockermouth .. ..	70	33	37	14.5	12.18
Keswick .. ..	75	35	40	16.9	13.5
Maryport .. ..	172	90	82	14.1	14.0
Penrith .. ..	133	68	65	14.3	12.4
Whitehaven .. ..	294	162	132	13.1	14.7
Workington .. ..	359	188	171	13.1	14.0
<i>Aggregate of Urban Districts</i> .. ..	1103	576	527	13.8	13.9
RURAL DISTRICTS					
Alston .. ..	29	13	16	12.1	10.9
Border .. ..	364	206	158	14.2	11.6
Cockermouth .. ..	246	125	121	13.8	13.2
Ennerdale .. ..	418	239	179	15.6	16.3
Millom .. ..	175	94	81	14.3	12.4
Penrith .. ..	156	82	74	13.8	12.3
Wigton .. ..	315	150	165	15.1	12.7
<i>Aggregate of Rural Districts</i> .. ..	1703	909	794	14.6	13.3

In the introductory letter, I have drawn attention to the fact that the total deaths at 2,806 were 232 higher than the previous year. I have already indicated elsewhere the principal sections under which this increase has fallen, but the following tables showing the principal causes of death give the position in detail.

For the purpose of comparison, I have included the figures for the two previous years. It will be seen that influenza and diseases affecting the heart and circulation account for the greater part of the increase. The increase in the deaths from influenza is not a matter which need cause any concern, as of course this occurs in epidemic form and varies from year to year, but the increase in the deaths from heart and circulatory diseases, and from such conditions as bronchitis and pneumonia strongly support the plea I have often made for additional medical beds in our hospitals.

I am glad to feel that the plans for the extension of the base hospital will include the provision of a certain number of additional medical beds.

### PRINCIPAL CAUSES OF DEATH.

Cause of Death.	No. of Deaths.		
	1935.	1936.	1937.
Heart Disease .. .. .	604	603	658
Cerebral Hæmorrhage, &c. .. .. .	196	207	222
Other Circulatory Diseases .. .. .	136	142	165
Cancer, Malignant Disease .. .. .	324	303	309
Senility .. .. .	155	149	133
Congenital Debility, Premature Birth, &c. .. .. .	120	121	120
Pulmonary Tuberculosis .. .. .	124	112	123
Other Tuberculous Diseases .. .. .	31	34	35
Pneumonia (all forms) .. .. .	138	111	129
Deaths by Violence (including Suicide)	111	110	111
Acute and Chronic Nephritis .. .. .	78	81	84
Bronchitis .. .. .	99	76	87
Diabetes .. .. .	34	49	44
Influenza .. .. .	44	26	114

### INFANTILE MORTALITY.

Of the 3,131 live births during the year, 192 infants died before reaching the age of twelve months. The infant death-rate per 1,000 live births is, therefore, 61, compared with the rate for 1937 for England and Wales of 58. The causes of death are shown in the following table :—

Cause of Death.	No. of Deaths.
Congenital debility, premature birth, etc. ..	118
Pneumonia (all forms) .. .. .	25
Bronchitis .. .. .	7
Other respiratory diseases .. .. .	1
Diarrhoea, etc. .. .. .	11
Other digestive diseases .. .. .	2
Non-pulmonary Tuberculosis .. .. .	1
Whooping Cough .. .. .	3
Influenza .. .. .	1
Measles .. .. .	1
Deaths by violence .. .. .	7
Other defined diseases .. .. .	15

---

192

---

The rise in the infantile mortality rate from 58 in 1936, to 61 in 1937, is regrettable. The trend of the infantile mortality rate for many years has been more or less steadily downward, but, of course, one cannot always expect to be progressing in the right direction, and it is perhaps worth remembering that the infantile mortality rate in 1908, when the Health Department of the County Council was established, was 126 per 1,000 live births.

A comparison of the foregoing table with the preceding year will show that the increase does not arise out of any marked increase under any one cause, but it is worth noting that the deaths from pneumonia and bronchitis have risen by 9, which further supports the plea for the provision of accommodation in our isolation hospitals for the treatment of bronchitis and pneumonia complicating certain epidemic diseases, and it is of interest to notice that the deaths from violence have risen from 2 to 7.

Arranged in the order of their infant mortality rates, the Urban and Rural Districts stand as follows :—

URBAN DISTRICTS.						No. of Infant Deaths.	Rate.
Cockermouth	..	..	..	..	..	5	74
Maryport	..	..	..	..	..	14	72
Penrith	..	..	..	..	..	9	58
Keswick	..	..	..	..	..	3	57
Workington	..	..	..	..	..	26	56
Whitehaven	..	..	..	..	..	23	56
Aggregate of Urban Districts						80	59
RURAL DISTRICTS.							
Ennerdale	..	..	..	..	..	38	86
Cockermouth	..	..	..	..	..	18	66
Wigton	..	..	..	..	..	22	65
Penrith	..	..	..	..	..	8	58
Border	..	..	..	..	..	17	47
Millom	..	..	..	..	..	8	43
Alston	..	..	..	..	..	1	22
Aggregate of Rural Districts						112	63

1937 Rate for England and Wales	..	..	58
1937 Rate for Cumberland County	..	..	61

## **GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.**

### **LABORATORY FACILITIES.**

Pathological and bacteriological examinations are carried out at the Pathological Department at the Cumberland Infirmary, with the exception of Wassermann tests, which are done at the University of Manchester. Chemical analysis of food and milk stuffs is undertaken by the County Analyst. No change has taken place in the above arrangements. It may, however, be worth noting that the change in the laboratory investigation of milk samples for cleanliness from the plate count to the methylene blue method has come into operation, and certain rearrangements of milk sampling for tubercle in bulk have effected certain economies so far as the County Council is concerned, but these economies have reacted detrimentally on the payments made to the Cumberland Infirmary Pathological Department, and this matter will require consideration by the appropriate committee.

There is in process of erection a new department of biological chemistry at the laboratory to deal with the analysis of water, food supplies and certain other matters under a special officer. These arrangements will still further increase the value of this laboratory to the public health services in the area.

I continue to be greatly indebted to Dr. Faulds, the Pathologist in charge of the laboratory, for his help and advice on many problems.

### **AMBULANCE FACILITIES.**

All parts of the County are now provided with ambulance services, and in about half of these the authority concerned, whether the local authority or an ambulance committee, has entered into arrangements with the County Council on the lines of the scheme which has been fully explained in previous years. The authorities at present co-operating are the Maryport and District Ambulance Association, the Cockermouth Rural District Council, the Wigton Rural District Council, the Brampton Ambulance Association, the Penrith Urban and Rural District Councils. In other parts



of the County no arrangement has been arrived at so far, and any necessary County Council arrangements are made by private car or ambulance. The provision of ambulances in the Cockermouth, Wigton and Border Rural Districts has proved of great benefit to persons resident in these districts.

### **NURSING IN THE HOME.**

Under the impetus of our statutory obligations under the Midwives Act, 1936, negotiations for the covering of the few unnursed areas of the County have proceeded. The new nursing association at Thursby and district is well on its feet, and negotiations for the formation of a nursing association in the parishes of Woodside, Waverton and Westward are proceeding, and are likely to be brought shortly to a successful conclusion. At the time of writing negotiations for the establishment of a nursing association for the parishes of Nicholforest, Solport and Stapleton have not proved successful. It is probable that very shortly this will be the only unnursed area in the County.

It would be ungracious not to make some reference to the spirit of co-operation in which the Cumberland Nursing Association and affiliated associations have assisted the County Council to make the necessary arrangements for carrying out the provisions of the Midwives Act.

These provisions, which are a statutory duty on the County Council, have necessitated some changes. There have been, for example, alterations in the salary scales of nurse-midwives employed by nursing associations. There has been of necessity some increased pressure for the provision of motor transport and of telephones, and for the provision of pensions for nurse-midwives. In some cases there have been readjustments of boundaries.

Such changes are apt to create difficulties in the local affairs of nursing associations, especially when it may not always be fully realised that, in the main, these changes are based upon the statutory duties placed upon the County Council by the Act. We are, therefore, under a great debt of gratitude to the Cumberland Nursing Association, and especially to its officials, and also to the officials of district nursing associations, for their help and co-operation. One should perhaps, particularly acknowledge the help of the Honorary Treasurer of the Cumberland Nursing Association (Mr. Smith-Hill).

It is also my obvious duty to point out how fortunate in this matter the County has been, in that during these negotiations the Chairman of the County Health Committee, and the Honorary Secretary of the Cumberland Nursing Association have been united in the person of Lady Mabel Howard, so that liaison has been easy and progress thereby greatly facilitated.

The problems created by the Act necessarily concern the midwifery services rather than the general nursing side, and, therefore, these are dealt with in the appropriate section of this report.

With regard to general nursing, there are one or two points still to be finally settled. For example, in the Hensingham district of Whitehaven, previously nursed by the West Cumberland Nursing Association, temporary arrangements are in operation at the time of writing, and a final solution of the general nursing in this district has not been decided upon.

There is no doubt that the increasing tendency for the provision of motor transport and telephone facilities for district nurse-midwives will be a very valuable development directly traceable to the Midwives Act. Looking back, it is a matter of wonder that district nurse-midwives have for so long carried out their duties in impossibly wide and exposed districts through the worst of the winter with no better means of transport than a push bicycle or a casual lift from a passing motor car, and often not even that.

### **CLINICS AND TREATMENT CENTRES.**

No new clinics or treatment centres have been opened during the year except at Brampton, where new clinic premises have been established in conjunction with the Public Assistance Department.

The alterations to the new clinic at Carlisle at the time of writing are approaching completion, and it is anticipated that this clinic will be in full operation in the early Summer.

At Aspatria ground has been obtained for the erection of one of the standard clinics to which reference has been made in the opening letter. These arrangements are subject, of course, to the approval of the County Council and of the appropriate Government Departments, but there is no reason to anticipate any difficulty in this connection.

The days and hours of clinic sessions attended by Medical Officers are shown below :—

# **DAYS AND HOURS OF ATTENDANCE AT TREATMENT CENTRES.** (Medical Officer's Sessions only).

<i>Centre.</i>	<i>School Clinic.</i>	<i>T.B. Dispensary.</i>	<i>M. &amp; C.W. Clinic</i>
<b>CLEATOR MOOR :</b> Stirlings Infirmery	..1st & 3rd Mon., 9-30 to 12-30	..2nd & 4th Tues., 1-30 to 4-0	..2nd & 4th Tues., 9-30 to 12 noon. Ante-natal, 1st & 3rd Mon., 2-0 to to 3-30.
<b>MILLOM :</b> Dunedin, Lapstone Road	..1st & 3rd Tues., 9-45 to 1-0	..2nd & 4th Wed., 1-30 to 3-0	..2nd & 4th Wed., 9-45 to 12-30. Ante-natal, 3-0.
<b>WIGTON :</b> Proctor House, Proctor Row	..2nd & 4th Mon., 10-0 to 12-30	..2nd & 4th Mon., 3-0 to 4-0	..2nd & 4th Mon., 2-0 to 3-0. Ante- natal by appoint- ment.
<b>EGREMONT :</b> The Hut ..	..2nd & 4th Thurs., 10-0 to 12-0	..2nd & 4th Thurs., 1-30 to 4-0	..1st & 3rd Thurs., 1-0 to 3-0. Ante- natal, 3-0.
<b>MARYPORT :</b> 58 Curzon Street	..2nd & 4th Fri., 10-30 to 12-30	..2nd & 4th Fri., 1-30 to 3-30	..1st & 3rd Tues., 2-0 to 4-30. Ante-natal, 3rd Friday, 2 p.m.
<b>PENRITH :</b> Southend House, Southend Road	..2nd & 4th Tues., 10-0 to 1-0	..2nd & 4th Tues., 3 p.m. onwards	..2nd & 4th Tues., 2-0 to 3-0. Ante- natal by appoint- ment.
<b>COCKERMOUTH :</b> Harford House, Main Street	..2nd & 4th Mon., 2-0 to 4-0	..2nd & 4th Thurs., 2-0 to 4-0	—
<b>ARLECDON &amp; FRIZINGTON .</b> Council Chambers	..2nd & 4th Mon., 9-30 to 12-15	..2nd & 4th Mon., 2-15 to 3-0	..1st & 3rd Fri., 9-30 to 12-15. Ante-natal, 1st Fri., 2-0 to 3-30.
<b>BRAMPTON :</b> Union Lane	..1st & 3rd Fri., 9-30 to 12-0	..1st & 3rd Fri., 3-0 to 4-0	..1st & 3rd Fri., 1-0 to 3-0. Ante-natal, by appointment.
<b>ALSTON :</b> Cottage Hospital	..2nd & 4th Wed., 1-30 to 3-0	—	..2nd & 4th Wed., 10-0 to 12-30
<b>WHITEHAVEN :</b> 102 Scotch Street	..2nd & 4th Wed., 9-30 to 12-0	..1st & 3rd Mon., 11-0 to 1-0 2-0 to 4-0	..2nd & 4th Wed., 1-30 to 2-30



<i>Centre.</i>	<i>School Clinic.</i>	<i>T.B. Dispensary</i>	<i>M. &amp; C.W. Clinic.</i>
WORKINGTON :			
Park Lane	.. ———	.. Mon., 2-0 p.m.	.. ———
		Fri., 2-0 p.m.	
CARLISLE :			
14 Portland Square	.. 2nd & 4th Wed., 9-30 to 12-0	.. 2nd & 4th Wed., 3-0 to 4-0	.. 2nd & 4th Wed., 1-30 to 3-0

## VENEREAL DISEASES CLINICS.

### Medical Officer's Sessions.

#### CUMBERLAND INFIRMARY.

Mondays	.. 2-30 p.m.	.. Women and Children.
Wednesdays	.. 2-30 p.m.	.. Men.
Wednesdays	.. 6 p.m.	.. Men.
Thursdays	.. 5 p.m.	.. Women (unable to attend
Thursdays	.. 6 p.m.	.. Men. on Mondays).

#### WHITEHAVEN AND WEST CUMBERLAND HOSPITAL.

Fridays	.. 2 p.m.	.. Women and Children.
Fridays	.. 5 p.m.	.. Men.

In addition irrigation is undertaken at the Cumberland Infirmary by the Nurse and the Male Orderly daily :—

At 5 p.m. for females (Sundays excepted).  
,, 6 p.m. for males.

## ORTHOPAEDIC CLINICS.

These are held in Whitehaven and Maryport every two months, and in Carlisle and Penrith every four months—Whitehaven on Wednesdays, Maryport on Thursday mornings, Carlisle and Penrith alternately on Thursday afternoons. Usually these clinics are held in the third week of the appropriate months.

While not strictly an orthopaedic clinic inside the County, reference should be made to the very valuable facilities extended to us by the Ethel Hedley Hospital at Windermere, whereby urgent or difficult cases are seen at the hospital by arrangement on the visiting days of the consulting surgeons. These facilities are extremely valuable, not merely for the solution of problems of exceptional difficulty or urgency, but, also in that they bridge the gap between the routine orthopaedic clinics held at the various centres in the County, as outlined above.

## DENTAL CLINICS.

These are held at Alston, Aspatria, Brampton, Carlisle, Cleator Moor, Cockermouth, Egremont, Frizington, Keswick, Longtown, Maryport, Millom, Penrith, Silloth, Whitehaven

and Wigton. Some are held twice a week, some once a week, and some once a fortnight. It is not possible to give a complete list of days, as some variation occurs according to circumstances.

The equipment at many of these clinics is not satisfactory and is receiving a thorough overhaul.

A portable X-ray plant, chiefly for use in the dental services, has been obtained.

### **HOSPITALS.**

Reference has been made in the introductory letter to this matter, and nothing further need be said here.

During the year we sent five cases of special difficulty to the Edinburgh Royal Infirmary, or to the Royal Hospital for Sick Children, Edinburgh.

### **THE PUBLIC ASSISTANCE MEDICAL SERVICE.**

The long drawn out negotiations for the establishment of the free choice of doctor for the sick poor in those areas of the County in which the appointments of the District Medical Officers are temporary were completed during the year, and a system of free choice was put into operation in approximately one half of the County. The system gives free choice to the sick person of a medical adviser among those practitioners who have agreed to go on the panel of practitioners for this purpose. The method of remuneration is by a unit payment. The present arrangements in this respect are temporary for an experimental period of twelve months.

The scheme provides for co-operation between the private practitioners concerned and this Department for the provision of "exceptional medicines and exceptional appliances," and for the provision of special investigation or treatment of difficult cases.

The following tables show the extent of the in-patient treatment carried out in the sick wards of the Public Assistance Institutions of the County during the year :—

TABLE A.

1. Total number of admissions (including infants born in hospital)	.. ..	438
2. Number of women confined in hospital	..	11
3. Number of live-births	.. ..	10
4. Number of still-births	.. ..	1
5. Total number of deaths	.. ..	111

TABLE B.

CLASSIFICATION OF IN-PATIENTS WHO WERE DISCHARGED FROM OR WHO DIED IN THE INSTITUTIONS DURING THE YEAR ENDED 31ST DECEMBER, 1937.

DISEASE GROUPS.				Children (under 16 years of age).		Men and Women.	
				Dis- charged.	Died.	Dis- charged.	Died.
A.	Acute infectious disease	..	..	4	1	1	—
B.	Influenza (1)	..	..	—	—	24	—
C.	Tuberculosis—Pulmonary	..	..	—	—	3	3
	Non-pulmonary	..	..	—	—	1	—
D.	Malignant Disease	..	..	—	—	2	14
E.	Rheumatism—						
	(i) Acute rheumatism (rheumatic fever), together with sub-acute rheumatism and chorea	..	..	—	—	16	—
	(ii) Non-articular manifestations of so- called "rheumatism" (muscular rheu- matism, fibrositis, and sciatica)	..	..	—	—	1	—
	(iii) Chronic arthritis	..	..	—	—	—	—
F.	Venereal disease	..	..	—	—	—	1
G.	Puerperal pyrexia	..	..	—	—	—	—
H.	Puerperal fever—						
	(a) Women confined in the hospital	..	..	—	—	—	—
	(b) Other cases	..	..	—	—	—	—
I.	Other diseases and accidents connected with pregnancy and childbirth	..	..	—	—	2	—
J.	Mental diseases—						
	(a) Senile Dementia	..	..	—	—	1	12
	(b) Other	..	..	—	—	19	2
K.	Senile decay (2)	..	..	—	—	13	17
L.	Accidental injury and Violence (3)	..	..	—	—	10	3
<i>In respect of cases not included above :—</i>							
M.	Disease of the Nervous System and Sense Organs	..	..	—	—	38	6
N.	Disease of the Respiratory System	..	..	7	—	40	12
O.	Disease of the Circulatory System	..	..	—	—	30	33
P.	Disease of the Digestive System	..	..	2	—	20	1
Q.	Disease of the Genito-urinary System	..	..	—	—	8	1
R.	Disease of the Skin	..	..	2	—	32	—
S.	Other diseases	..	..	4	—	16	—
T.	Mothers and infants discharged from Maternity Wards, and not included in above figures	..	..	10	—	11	—
U.	Any persons not falling under any of the above headings	..	..	—	—	13	—
Totals				29	1	301	110

(1) Including Acute Influenzal Pneumonia.

(2) Confined to cases and deaths in which no more specific diagnosis was practicable.

(3) Including suicides, attempted suicides, and poisoning cases.

## INSTITUTIONAL PROVISION FOR THE CARE OF MENTAL DEFECTIVES.

I am indebted to the Clerk to the Joint Mental Deficiency Committee for a copy of the Annual Report on the work of the Joint Committee for the year, from which I take the following extract dealing with institutional accommodation:—

“ On the 31st December, 1937, 334 patients chargeable to the Joint Committee were under order in Institutions or on licence therefrom. The comparable figure at the end of 1936 was 313. The distribution of the cases as between the Constituent Authorities was as follows :—

	Males.	Females.	Total.
Cumberland ..	95 ..	112 ..	207
Westmorland ..	37 ..	27 ..	64
Carlisle .. ..	30 ..	33 ..	63
	<hr/> 162	<hr/> 172	<hr/> 334

The distribution of the cases enumerated above, among institutions, was as follows :—

At Dovenby Hall Colony .. ..	176
At Milnthorpe Institution .. ..	76
At the Royal Albert Institution .. ..	17
At Rampton State Institution (including Auxiliary Homes) .. ..	12
At Durran Hill House, Carlisle. .. ..	9
At other Institutions .. ..	44
	<hr/> 334

In April, 1937, a start was made upon the new extensions at Dovenby Hall Colony. At the time of writing the new laundry is almost ready for operation; the three new homes are erected, roofed, rough-cast and partially completed internally; the auxiliary services, *e.g.*, water, sewerage, etc., are practically completed, but the new recreation hall is in a less advanced state. The progress has been slow and the delay has been ascribed to the difficulty in obtaining skilled labour.

The extensions, when complete, will provide accommodation for about 120 female patients, and we expect that the accommodation on the women's side will be adequate to meet the demands for beds for the next five or six years. For girls, the accommodation cannot be considered sufficient, and the addition of another small home is very desirable. With such additional accommodation it would be possible to reserve Orchard House for girls up to the age of 11/12 years, and to use a new villa which might, perhaps, have 50 beds, for trainable girls from 12 to 18 years.

In our last report we again drew attention to the need for the provision of more accommodation for male patients. At the present time the available accommodation consists of two homes of sixty beds each. One home is reserved for patients over 16 years of age, and every bed is occupied. The other home is at present used for all cases under 16 years. We doubt whether this more or less arbitrary division between those over 16 and those under 16 is satisfactory, and we definitely believe that it is undesirable, as we pointed out in our last report, that boys of 16 years should, on attaining that age, be forthwith transferred to a home where they will mix with much older defectives. Apart from these considerations further accommodation for male patients is urgent. The outflow from the adult home cannot keep pace with the inflow of those who have reached 16 years.

Generally, therefore, on the question of accommodation we strongly recommend that the Committee should consider the early erection of:—

- (a) One home of 50 beds for trainable girls of 12-18 years.
- (b) One home of 50 beds for boys up to 12 years of age."

## **MATERNITY AND CHILD WELFARE.**

### **MATERNAL MORTALITY.**

The number of Maternal Deaths occurring in the County during the year was four, which gives a maternal death-rate per 1,000 births of 1.23. The corresponding death-rate for England and Wales for 1937 was 3.23. The corresponding



figures for Cumberland for the years immediately preceding are as follows ;—

23 deaths equal to a rate of	6.79 in 1933
17        „                    „	4.94 in 1934
14        „                    „	4.06 in 1935
13        „                    „	3.94 in 1936

The four deaths which occurred in 1937 were divided as follows :—

Puerperal Sepsis	..	..	..	1
Other Puerperal Causes		..	..	3

#### DISTRIBUTION BY AREAS.

<i>Puerperal Sepsis.</i>	<i>Other Puerperal Causes.</i>
Whitehaven Borough .. 1	Workington Borough .. 1
	Whitehaven Borough .. 1
	Cockermouth Rural .. 1
<hr/> 1 <hr/>	<hr/> 3 <hr/>

Analysing the causes of death, the record of one death from Sepsis is the lowest ever recorded. The average for the past five years has been five deaths per annum from Puerperal Sepsis.

Among the deaths classified as Other Puerperal Causes, the death certificates show the causes of death to be as under:—

Hæmorrhage and Placenta Prævia	..	..	1
Hæmorrhage and Shock	..	..	1
Toxæmia	..	..	1

Of the total four deaths, three occurred in hospital, and one at home.

The work of the ante-natal scheme during the year is shown in the following tables :—

			Ante-natal Examinations by Private Practitioners.	Ante-natal Examinations at Clinics.	Total.
Examined at Surgery .. ..	406	66			
Examined at Home .. ..	827				
	1233	..	..	1299	
Findings at Examinations—					
Normal .. ..	672	21	693		
Abnormal .. ..	561	45	606		
Number of Further Examina- tions .. ..	833	84	917		
Post-Natal Examinations ..	23	—	23		
Recommended for Hospital—					
On account of Home Conditions .. ..	68	3	71		
On account of Patient's Condition .. ..	82	3	85		
Recommended to have Dr. at Confinement .. ..	53	1	54		
Specialist's opinion recommended	27	8	35		
Extra nourishment recommended and granted .. ..	195	43	238		
Dental treatment recommended in 269 cases.					
Actually treated, 154 cases. 115 Refused Treatment or cancelled.					

#### SUMMARY OF ABNORMALITIES FOUND ON ANTE-NATAL EXAMINATION :—

Anæmia and General Debility .. ..	28
Albuminuria and Oedema .. ..	64
Varicose Veins .. ..	115
Vaginal Discharge .. ..	49
Malpresentation .. ..	40
Heart Condition .. ..	11
Dental .. ..	121
Contracted Pelvis .. ..	68
Hæmorrhage .. ..	8
Prolapse of Uterus .. ..	1
Pyelitis .. ..	5
Venereal Disease .. ..	1
Tuberculosis .. ..	3
History of Difficult Labours .. ..	8
Failure of Head to engage .. ..	4
Raised Blood Pressure .. ..	23
Glycosuria .. ..	8
Other Abnormalities—unsatisfactory general health	49

These tables, as usual, are interesting. They show that 1,299 expectant mothers were examined under the County Council scheme, the vast majority being examined at the homes of the patients or at the surgeries of the doctors concerned by the medical practitioners in the area.

Ante-natal examinations at clinics amounts to a negligible figure, and gradually the whole of the work of the ante-natal examination of expectant mothers in this area, apart from specialist examinations is passing into the hands of the medical practitioners in the area.

As previously pointed out, a high percentage of all cases booked by midwives are now ante-natally examined under the County Scheme. Certain emergency bookings, of course, provide exceptions, but the number of actual refusals on the part of the women concerned has now fallen to a negligible figure.

The total number of ante-natal examinations, including second or subsequent examinations, rose from 1,800 in 1936 to 2,216 in 1937. The rise is chiefly due to the increase in the number of second or subsequent examinations in accordance with the wishes of the Ministry of Health. These figures rose from 552 in 1936 to 917 in 1937.

It may be interesting to look back a few years to make a comparison.

In 1932 the total number of ante-natal examinations was exactly 900, so that the amount of supervision of expectant mothers has very greatly increased.

The increase has implied additional cost to the Authority, and much additional work in administration, but if this has contributed, as no doubt it has, to the present low figure of maternal deaths, then both the expenditure and the work have been justified.

The number of patients recommended for confinement in hospital on account of home conditions was 71. This is considerably less than for the previous year. The number recommended for hospital confinement on account of the patient's condition at 85 remains practically the same as the previous year.

The number of cases recommended for extra nourishment shows a decrease at 238.



I set out below the same table as was included in last year's report in this connection, brought up to date to include 1937.

Year.	No. of Expectant Mothers receiving Extra Nourishment.				No. of Maternal Deaths.		
1933 .. ..	148	..	..	..	23		
1934 .. ..	206	..	..	..	17		
1935 .. ..	278	..	..	..	14		
1936 .. ..	295	..	..	..	13		
1937 .. ..	238	..	..	..	4		

The number of cases recommended for dental treatment shows a substantial increase, but actually the number treated was rather lower. The reasons for this were :—

1. the advanced stage of the pregnancy when the recommendation was received, and
2. refusal to accept treatment.

Post-natal examinations rose slightly to 23. This, of course, as I have pointed out before, is a ridiculous figure, out of some 3,000 births, even admitting that a considerable number of cases are dealt with privately.

The appointment of a Consultant in Gynaecology and Obstetrics, which has now at the time of writing become effective, should result among other things, in the initiation of an adequate service in this respect so far as the official schemes of the County are concerned. The unfortunate position, of course, is that pending the provision of adequate hospital facilities, the Consultant appointed will for a time be greatly restricted in the scope of his work.

There was no significant alteration in the proportion of abnormal to normal cases as revealed by the ante-natal examination.

The number of abnormal cases recommended for hospital confinement remains very low, only 85, which seems to be out of all proportion to the abnormalities found, which, excluding dental defects, amounted to 337.

It is a curious thing that although the congestion in our maternity beds increases steadily, and in fact during the year created a situation of emergency on a number of occasions so that steps had to be taken to adopt a policy of restriction of admissions, nevertheless the number of cases recommended for admission on account of abnormalities does not rise.

This figure in fact over a period of years, and in spite of the great increase in the number of ante-natal examinations, has not shown any substantial increase.

Two-hundred-and-four cases were admitted to hospital for the following reasons :—

Home conditions unsatisfactory	..	..	..	93
General condition, anæmia, etc.	..	..	..	10
Albuminuria .. .. .	..	..	..	21
Contracted pelvis	..	..	..	16
Bad previous history	..	..	..	8
Placenta prævia	..	..	..	2
Eclampsia	..	..	..	2
Cæsarean section	..	..	..	6
Hyperemesis gravidarum	..	..	..	3
Malpresentation	..	..	..	10
Abortion	..	..	..	9
Puerperal Sepsis	..	..	..	2
Varicose Veins	..	..	..	2
Hæmorrhage	..	..	..	2
Other causes .. .. .	..	..	..	28
				<hr/> 204 <hr/>

These cases were admitted to the following hospitals and nursing homes. For the purposes of comparison, the figures of admissions to the same hospitals for 1935 and 1936 are shown :—

	1935.	1936.	1937.
Whitehaven & West Cumberland			
Hospital .. .. .	60	66	39
Workington Infirmary .. ..	39	41	43
Victoria Cottage Hospital, Mary-			
port .. .. .	29	19	14
Carlisle Corporation Maternity			
Hospital .. .. .	51	52	27
Carlisle City General Hospital ..	24	58	58
Alston Cottage Hospital.. ..	7	5	5
Hope Hospital, Leeds .. ..	2	1	—
St. Monica's Home, Kendal .. ..	—	3	—
Cumberland Infirmary .. ..	—	1	1
	<hr/> 212 <hr/>	<hr/> 246 <hr/>	<hr/> 187 <hr/>

In addition, seven cases of sepsis were admitted to the Carlisle Infectious Diseases Hospital at Crozier Lodge, and 20 cases were admitted to private Nursing Homes.

The figures in these two tables do not, of course, actually tally, because sometimes cases are admitted and discharged, and re-admitted, or transferred from one Institution to another.

The figure of cases admitted at 204 shows a very substantial fall from the previous year, when the figure was 262.

As I pointed out, this reduction was not accompanied by any decrease in the difficulty in obtaining beds for County cases, but rather the reverse, and the only inference is that there has been increased use of the available beds by cases coming in from other sources.

It might be thought that some answer to the problem would be found in increased emergency admissions, but so far from this being the case, only 41 cases were admitted as emergencies as against 67 for 1936.

The fall in emergency admissions is satisfactory, because such admissions, while to a considerable extent due to emergencies arising during labour, are also—to an appreciable extent—due to women making no arrangements about their confinement until the last moment, which state of affairs is neither fair to the doctor in charge, to the hospital, or to the patient herself.

In addition to the cases referred to above, in which confinement took place in hospital or in private nursing homes, 11 confinements took place in the sick wards of the Public Assistance Institution, Whitehaven, during the year.

Here again is a further proof of the congestion of beds, because—emergencies excepted—maternity cases are not referred to Public Assistance Institutions if other beds are available.

At the time of writing this section of the report, the official figures of births in the area during the year are not available, but assuming the number of births to have been approximately the same as the previous year, the position is that the admission to hospital for confinement represents something under 10% of the births, as compared with over 12% for the previous year. The figures in both years exclude the Boroughs of Workington and Whitehaven, and, of course, exclude the cases admitted to hospital or private nursing homes privately.

The number of visits paid during the year by Health Visitors and District Nurses to expectant mothers amounted to 9,935—nearly 1,000 more than the previous year.

Home Helps were provided in 16 cases, and two cases were sent to the Silloth Convalescent Home for a period of convalescent treatment following their confinements.

### **INFANTILE MORTALITY.**

This question has been dealt with in the first section of this Report.

### **HEALTH VISITING.**

The number of visits paid by the whole-time Health Visiting Staff and District Nurses during the year to children under 1 year of age amounted to 22,032, and to children between the ages of 1 to 5 years, 14,933.

All the facilities of the School Medical Service are now available for children under 5 years of age, and proof of the practical value of this particular section of the work lies in the fact that the entrants group of school children does not show an appreciably higher proportion of defects requiring treatment than the intermediate and leaver groups.

No solution has yet been found to the difficult problem of extending the use of milk among young children under school age. The Milk Marketing Board have this matter in hand, and are known to be anxious to extend their scheme of "cheap" milk now operating successfully in our schools to expectant and nursing mothers and young children.

The problem of arranging a method of distribution under administrative control, which will not be unduly complicated, is, I imagine, proving very difficult. Certain experimental areas have, I understand, been trying out certain methods. One of these areas is the Borough of Whitehaven. So far as I know, however, no experiment has been found practicable in a scattered rural county like ours.

That some method will ultimately be found, in fact must ultimately be found, cannot be doubted, because it is clearly imperative in the national interest that expectant and nursing mothers and children under school age, the groups of the population who probably need more milk than any others, should have available just in the same way as school children, a scheme for a "cheap" or subsidised milk supply.

No new Maternity and Child Welfare Centres were opened during the year. A new centre will be opened in

Carlisle during 1938, and I hope that the proposed centre at Aspatria will not be long in materialising.

The attendances at the Maternity and Child Welfare Centres continues to grow. The number of children under one year of age who attended for the first time was 570, and between the ages of 1 and 5 years 605. The total number of attendances at these Centres during the year by children amounted to 4,441. During the year 146 children under five years of age received dental treatment, 37 received treatment for eye diseases, and 33 for diseases of the ear, nose and throat. Orthopædic treatment is dealt with elsewhere in this report.

The work of the Voluntary Maternity and Child Welfare Centres in Penrith, Wigton and Cockermouth, has continued satisfactorily.

In Penrith 83 infants and 77 children between 1 and 5 years of age attended, and made a total of 967 attendances. Forty-four clinic sessions were held. At Cockermouth 25 children under 1 year of age attended, and 45 between the ages of 1 and 5. Twenty-one clinic sessions were held, and 735 attendances were recorded. In the case of Wigton, 12 children under 1, and 19 between 1 and 5 attended; six clinic sessions were held, and the total attendances amounted to 73.

### MATERNITY AND NURSING HOMES.

No new applications for registration were received during the year. One home previously registered was closed.

No powers have been delegated under Section 194 of the Public Health Act, 1936, to any council of a county district.

### PUERPERAL FEVER AND PUERPERAL PYREXIA.

During the year 5 cases of Puerperal Fever and 21 cases of Puerperal Pyrexia were notified, making a total of 26, as compared with 32 for the previous year.

The position in regard to these diseases, as compared with previous years, is as under :—

In 1929 there were 10 cases notified with 4 deaths from Puerperal Sepsis.						
„ 1930	„	6	„	„	4	„
„ 1931	„	39	„	„	3	„
„ 1932	„	41	„	„	8	„
„ 1933	„	31	„	„	3	„
„ 1934	„	34	„	„	9	„
„ 1935	„	33	„	„	2	„
„ 1936	„	32	„	„	3	„
„ 1937	„	26	„	„	1	„



### CHILDREN AND YOUNG PERSONS ACT, 1933.

The work of supervision and visitation of the children who are boarded-out under the terms of the above Act has been carried out, as hitherto, by the whole-time Health Visitors of the County Council, who are designated and specially approved as Infant Life Protection Visitors.

No case of child neglect among these boarded-out children came to our notice during the year.

It is sometimes thought that private individuals responsible for the boarding-out of young children with foster parents do not discharge regularly their financial liabilities in connection therewith. Investigations I have had made during the year show that in this area at least there is no foundation for this suggestion. Out of a total of 34 boarded-out children under supervision it was found that only in one case were the payments irregular, and in three cases only had the responsible relative ceased payment.

The statistical position is given below :—

#### REPORT ON VISITATION OF CHILDREN FOR THE YEAR ENDED 31st DECEMBER, 1937.

		<i>Legit.</i>		<i>Illeg.</i>		<i>Total</i>	
		<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>
A.	No. of children under supervision on 1st January, 1937 .. ..	7	2	24	11	31	13
B.	No. brought under supervision during the year ended 31st December, 1937 .. ..	—	1	2	6	2	7
C.	No. removed from register during the year ended 31st December, 1937 .. ..	1	—	11	6	12	6
D.	No. remaining under supervision as at 1st January, 1938 ..	6	3	15	11	21	14
E.	Total No. of 1st Visits to Homes by Health Visitors ..						9
	„ Re-visits „ „ ..						254
	„ Children concerned .. ..						53

### MIDWIVES.

During the year 120 Midwives notified their intention to practise. This figure includes holiday and relief Midwives, and covers other changes or temporary engagements. The average number of Midwives practising is 83. Twelve Midwives resigned their appointments under the County Nursing Association, and three surrendered their certificates under the provisions of the Midwives Act. Of the three who surrendered their certificates one is included in the twelve resigned, and the other two are not included, one being an

independent midwife, and the other being a midwife who had been on sick leave for a prolonged period.

Fifteen new Midwives were appointed, including three appointments in connection with the Midwives Act, that is to say, a second nurse to Millom and Maryport, and a new one for the Thursby area.

The Supervisor of Midwives paid 245 routine visits of midwifery inspection during the year, in addition to 141 special visits in connection with Puerperal Sepsis and Pyrexia and Ophthalmia, and other matters.

The work of the Midwives during the year has, on the whole, been well and efficiently carried out.

One-thousand-three-hundred-and-sixty-seven cases were attended by the Midwives as "midwives" cases. The Midwives also attended 638 "maternity" cases with a doctor in attendance. Medical Help was summoned by the Midwife on 1,022 occasions. The causes for which medical help was sought are set out below :—

#### FOR THE MOTHER.

Delayed Labour	..	..	..	..	221
Ruptured Perineum	..	..	..	..	215
Ante-partum Hæmorrhage	..	..	..	..	40
Post-partum Hæmorrhage	..	..	..	..	13
Vaginal Discharge	..	..	..	..	19
Albuminuria	..	..	..	..	78
Abortions and Miscarriages	..	..	..	..	45
Swellings of Legs and Oedema	..	..	..	..	16
Rise of Temperature	..	..	..	..	36
Retained Placenta	..	..	..	..	10
Varicose Veins	..	..	..	..	4
Breech and Malpresentations	..	..	..	..	31
Unsatisfactory Condition of Patient	..	..	..	..	41
Premature Labour	..	..	..	..	11
Inflammation of Breast	..	..	..	..	10
Sickness	..	..	..	..	9
Contracted Pelvis	..	..	..	..	7
Pyelitis	..	..	..	..	2
Phlebitis	..	..	..	..	2
Placenta Prævia	..	..	..	..	1
Heart Conditions	..	..	..	..	7
Twin Pregnancy	..	..	..	..	4
Cough	..	..	..	..	4
Kidney Trouble	..	..	..	..	2
Asthmatic Condition	..	..	..	..	1
Post-partum Eclampsia	..	..	..	..	1
Other Causes	..	..	..	..	63



## FOR THE CHILD.

Eyes Discharging .. .. .	49
Feebleness .. .. .	24
Cripple Condition .. .. .	12
Tongue-tied .. .. .	2
Cyanosed Condition .. .. .	3
Inflammation of Breast .. .. .	4
Phimosis .. .. .	2
Hæmorrhage .. .. .	3
Jaundice .. .. .	3
Stillbirth .. .. .	1
Umbilical Hernia .. .. .	1
Death .. .. .	2
Other Causes .. .. .	18
Premature .. .. .	5
	<hr/> 129
	<hr/> 1022

There was no substantial variation in the reasons for which medical help was sought from previous years. Taking the figures as a whole, both for mother and child, there was a substantial increase in the number of occasions on which medical help was sought. The figure of 1,022 compares with 901 for the previous year, and, as I pointed out in my last report, up till a few years ago the annual average was about 600 a year. Since then, and particularly in the last three years, the number of occasions on which the midwife has sent for medical help has been rising rapidly.

The number of cases of abortion remain practically the same as the previous year.

Distribution by areas is as under :—

Workington Borough .. .. .	15
Penrith Urban .. .. .	4
Aspatria Urban .. .. .	2
Border Rural .. .. .	2
Cockermouth Rural .. .. .	8
Ennerdale Rural .. .. .	9
Penrith Rural .. .. .	2
Millom Rural .. .. .	2
Wigton Rural .. .. .	1
	<hr/> 45

I do not think these figures call for any comment, in view of the somewhat detailed review which has been given to this matter in previous reports.

The figures given in previous reports regarding compensation paid to Midwives for loss of fees by removal of patients to hospital, and payment on behalf of necessitous persons in connection with midwife's fees, no longer apply. These matters are now dealt with in a block grant paid by the County Council to the County Nursing Association.

During the year six lectures were given to the Midwives, three at Carlisle and three at Whitehaven, viz. :—

SISTER HAYES,	.. .. .	.. " Uterine Inertia."
<i>Sister Tutor, Liverpool Maternity Hospital.</i>		
Miss WEBB,	.. .. .	.. " The Midwife of the
<i>Superintendent of Queen's Nurses, Carlisle.</i>		Future."
Dr. CAMPBELL	.. .. .	.. " Breast Feeding and
		Normal Breech Pre-
		sentation."

The County Council pay the fares of Midwives travelling from a distance to attend these lectures.

No Midwives were sent for post-graduate course during the year, but the matter is in hand, and Midwives will be sent during 1938 for post-graduate work, both by the County Council and the Cumberland Nursing Association.

### THE MIDWIVES ACT, 1936.

This complicated and difficult Act came into operation on the 1st August, 1937, and formed the subject of many meetings, consultations, and conferences during the year.

As has been pointed out elsewhere in this report, it is only the co-operation of the Cumberland Nursing Association in the matter which has made it possible to provide for the carrying out of the Act throughout the County without abnormal additional expense to the County Council. Even as it is the additional expense incurred by the County Council in employing additional midwives, in paying compensation to midwives retiring, and in increased grant to the Cumberland Nursing Association to pay for increased salaries, pensions, new districts, motor transport, etc., is, and will continue to be, considerable.

With the desire to see the conditions of the Midwives improved, in respect of salary, pensions, and off-duty time, everyone, I imagine, is agreed, but the provisions of the Act

go much further than this, and have compelled the County Council to place a number of whole-time Midwives in districts in which the work has hitherto been satisfactorily carried out by Midwives employed part time for midwifery by nursing associations, or by independent Midwives.

The negotiations with district nursing associations, between the County Council on the one hand and the Cumberland Nursing Association as the central body on the other hand, have been fraught with many possibilities of friction, due to the understandable irritation arising out of interference with local conditions, in respect of such matters as salaries, pensions, and off-duty time, co-operation between adjoining districts, and the provision of motor transport and telephone.

In the main, matters have proceeded smoothly, but an immense amount of work has been involved. I am very doubtful whether time will show that any corresponding advantages have followed the operations of the Act in respect of any reduction in the rate of maternal mortality. I have pointed out elsewhere that for 1937, *before the Act really came into effective operation*, our number of maternal deaths fell to four, which is far the lowest on record, and actually for the first quarter of the current year (1938), we have not had a single maternal death in—taking the average—some 750 confinements. Actually the position is that the County Council have decided :—

- (1) to place four whole-time Midwives in the Borough of Whitehaven.
- (2) to place a whole-time Midwife in Penrith.
- (3) to appoint a whole-time relief Midwife for general duty.
- (4) the County Council have agreed, after consultation with the Town Council of Workington, that the Town Council in that Borough shall administer on behalf of the County Council, the midwifery services.

The following steps have also been taken :—

- (5) in consultation with the district nursing associations concerned the County Council have arranged for an additional nurse-midwife to be provided for (a) Millom, (b) Maryport.
- (6) the uncovered district of Thursby and the surrounding area has been dealt with by the establishment of a nursing association for that area.

- (7) negotiations have been in progress for the establishment of a nursing association in the Woodside district of the Wigton R.D., and it is expected that an association will shortly be formed.
- (8) negotiations have also been in progress for the establishment of a nursing association in the Nicholforest area, but up to the time of writing without success.
- (9) negotiations have been in progress also with the Alston and District Nursing Association for an agreement for that area similar to the arrangements made for other parts of the County with the Cumberland Nursing Association ; at the time of writing these negotiations are still in progress.
- (10) the uncovered district of Broughton Moor was included in Great Broughton Nursing Association, as from January 1st, 1938. A motor car has been provided for this area.
- (11) certain nursing associations previously working independently have become affiliated to the Cumberland Nursing Association ; these are Wigton, and Farlam and Midgeholme.
- (12) new and better scales of salaries for fully trained and partly trained Midwives have been adopted for the area as a whole, and these are now in operation throughout. These scales were explained in my last Annual Report.
- (13) a considerable increase in motor car transport has been arranged for, and a number of telephones have been installed at the homes or lodgings of the nurse-midwives.
- (14) steps are being taken to arrange general standards of off-duty time, and for co-operation between adjoining nursing associations in this respect.
- (15) the attention of nursing associations has been drawn to the necessity for making provision for superannuation of all nurse-midwives. In this respect, at the time of writing, a considerable number of associations have not completed the necessary arrangements.
- (16) preliminary steps have been taken for the provision of post-graduate training for Midwives whether employed whole-time by the County Council, or employed by Nursing Associations. These will be

gradually brought into operation during 1938. A post-graduate week-end for nurses and nurse-midwives was arranged for the early spring of 1938, but this falls more properly for consideration next year.

- (17) standard fees for midwifery and maternity services have been fixed for the area, and appropriate scales for abatement in necessitous cases. The arrangements for the payment for loss of fees, in respect of patients removed to hospital, and for assistance in necessitous cases, have been consolidated in the block grant paid to the Cumberland Nursing Association.

### ORTHOPAEDIC TREATMENT.

The work of the Orthopaedic Department, so far as the treatment of school children is concerned, has already been dealt with in the Annual Report on the School Medical Service. An increasing number of cases are coming under the Health Department, either of children under school age, of tuberculous persons of any age, or of adult non-tuberculous persons, and fall to be considered in this report.

During the year 102 cases of crippling conditions affecting children under five years of age were dealt with. The following is a list of the crippling conditions concerned :—

Tuberculosis .. .. .	5
Hydrocephalus .. .. .	2
Rickets .. .. .	39
Congenital Dislocation of the Hip .. .. .	3
Torticollis .. .. .	2
Infantile Paralysis .. .. .	8
Birth Palsy .. .. .	1
Talipes .. .. .	14
Spina Bifida .. .. .	3
Flat Foot .. .. .	4
Scoliosis .. .. .	1
Fragilitas Ossium .. .. .	1
Other Conditions .. .. .	19
	<hr/>
	102
	<hr/>

There is no point calling for special comment in this list, except perhaps that the number of cases of rickets and of talipes is considerably lower than for the previous year.



Of the foregoing list of cases, 17 received hospital treatment, the remainder being under the care of the Orthopædic Surgeon locally, and receiving their supervision, or treatment, or after-care at their homes in Cumberland.

Thirty-seven school children received treatment for tuberculosis of the bones and joints, nine of these being treated in hospital, and the remainder at home on frames or with splints or plaster.

Fifty-eight adult cases of tuberculosis of the bones and joints were treated during the year. The number of cases so treated is steadily increasing. I do not think this means that there is an increase in the incidence of tuberculosis of bones and joints in adults, but rather that more cases are referred by hospitals and private practitioners to the Orthopædic Section. The conditions during the year were as under :—

Spine	..	..	..	..	..	..	28
Knee	..	..	..	..	..	..	7
Hip	..	..	..	..	..	..	11
Sacro-Iliac Joint			..	..	..	..	4
Feet	..	..	..	..	..	..	6
Thigh	..	..	..	..	..	..	1
Wrist	..	..	..	..	..	..	1
							<hr/> 58 <hr/>

Twenty-five cases received hospital treatment. The hospital treatment of surgical tuberculosis, particularly in adults, is prolonged and costly, and the later these cases come under observation the more prolonged and costly, and in the end the less satisfactory, is the treatment provided.

We have been fortunate in being able to obtain the necessary beds for these cases at the Shropshire Orthopædic Hospital, with comparatively little delay.

With regard to adult non-tuberculous cripples—which matter formed the subject of a special report in 1935—we have dealt with 20 cases during the year. A number of these received hospital treatment at the Shropshire Orthopædic Hospital, the Public Assistance Committee being liable for maintenance. After-care is dealt with by the Orthopædic Department in the usual way. Appliances are provided by



the Public Assistance Committee. I have often said that I think it would be a much more satisfactory arrangement if the Health Committee would undertake liability for all crippling conditions whatever their nature, and whatever the age of the patient. Such an arrangement would not increase the cost, and, although the present arrangements work smoothly enough, there is an unnecessary complication in more than one department being concerned.

The outstanding matter of importance during the year was the incidence of an epidemic—fortunately a limited one—of Infantile Paralysis. This matter is one we cannot afford to regard with complacency, because our cripple register during the past 18 years has contained innumerable cases of gross deformity arising out of previous epidemics.

It is a little disturbing to have to report that during the early part of 1938 a number of additional cases of this disease have occurred in an area of the County not affected by the previous outbreak.

The epidemic began in July, 1937, in the Penrith Urban District. A case subsequently occurred in the Penrith Rural District, and some in the Border Rural District. In all 14 cases occurred, although it should be mentioned that in one or two cases the symptoms were so slight that the diagnosis was not too certain.

All cases referred to us were immediately removed to hospital—several on the day of notification. The children went to the Ethel Hedley Hospital, Windermere, and I have already in the Report on the School Medical Service drawn attention to our obligation to the Medical Superintendent of the Hospital—Miss Bucknell—for her prompt and adequate co-operation in the matter. The adult cases were removed to the Shropshire Orthopædic Hospital. Certain other suspected cases were also removed to hospital, but the diagnosis was not confirmed.

I regret to have to say that one case died of the disease within twenty-four hours of notification. Two cases occurring in the area—although one was not in the administrative county—presented the very remarkable and rare circumstance, that the present was a *second* attack. In both cases a previous attack had resulted in paralysis of the right leg. In the present attack in both cases the left leg became paralysed.

The administrative action taken in connection with the epidemic, apart from the arrangements made with the orthopædic hospitals, took the form of a circular letter to all medical practitioners in the area, explaining the arrangements above, together with a copy of the Ministry of Health's Memorandum on the subject of the disease.

On the question of the treatment of fractures, a public meeting was held in Carlisle during the year, which was addressed by Mr. Harry Platt, F.R.C.S., of Manchester. The meeting was attended by representatives of many public interests. I think one may say that as a result of the meeting the plans for the hospital developments at Carlisle and Whitehaven will both include fracture units, and the plans for the Cumberland Infirmary will also include provision for orthopædic cases. Such a unit would be a definite advantage, because it would then become unnecessary to send so many of our orthopædic cases long distances away from their homes during the long period of hospital treatment. The general idea is that a specialist in fractures and orthopædics will ultimately be appointed for the area on the staff of both hospitals, and will link up the whole scheme of fracture treatment in the County. In an industrial county of this kind the benefit of a properly organised scheme for the treatment of fractures is indisputable. The Central Council for the Care of Cripples have kindly promised to allocate out of the Nuffield Fund a contribution towards the salary of such a specialist for an initial period of years.

### **DENTAL SERVICES.**

Report of the Senior Dental Officer.

*To the County Medical Officer.*

SIR,

I beg to report as follows for the year 1937 :—

During the year dental treatment has been carried out under the following services—Maternity and Child Welfare and Tuberculosis, while a large number of cases have been referred for treatment by the Public Assistance Committee. In the report for 1936, mention was made of the appointment of a second mechanic to cope with the arrears in this branch. These arrears were practically overtaken by the end of the year, and it is probable that, with the further addition of the second dental apprentice

to the staff, it will now be possible to keep this side of the services fully up-to-date. The new workshop at No. 14 Portland Square should be of definite assistance in this, by allowing the mechanical staff to work under conditions which will certainly simplify increased output. These premises will be ready for occupation by April, 1938.

As far as possible these services for adult patients are carried out by the Dental Officers after school clinics are finished, but in the depressed areas of the County the number of cases being referred prevents this being strictly adhered to.

The statistical table which is appended has been brought up-to-date, and shows the comparative figures for 1935-36-37.

I have the honour to be, Sir,

Your obedient Servant,

A. C. S. MARTIN,  
*Senior Dental Officer.*

COMPARISON OF ANCILLARY SERVICE FIGURES FOR 1935, 1936, 1937.

	Number of Patients Treated.			Number of Teeth Extracted.			Number of Teeth Filled.			Number of General Anaesthetics.			Number of Local Anaesthetics.			Number of Dentures.		
	1935	1936	1937	1935	1936	1937	1935	1936	1937	1935	1936	1937	1935	1936	1937	1935	1936	1937
Ante-Natal ..	133	303	232	1990	2210	1891	13	30	—	64	69	36	142	234	266	87	162	177
Tuberculosis ..	14	32	14	97	170	181	8	12	—	3	1	—	11	31	29	19	10	28
Public Assistance	152	456	567	2632	3690	3233	2	10	19	40	30	13	149	426	434	80	328	535
Blind Persons Further Education Schemes, &c. ..	—	15	16	—	122	48	—	10	—	—	2	2	—	13	3	—	26	14
Total of All Services	299	806	829	4719	6192	5353	23	62	19	107	102	51	302	704	732	186	526	754

## **SANITARY CIRCUMSTANCES OF THE AREA.**

---

### **(A) HOUSING.**

---

#### **HOUSING (RURAL WORKERS) ACTS, 1926 & 1931.**

---

The position at the 31st March, 1938, in this matter is that a total of 1,026 applications have been made for assistance by way of grants or loans from the County Council. Of these 104 were in respect of the conversion of buildings not previously used as dwellings, and 922 were in respect of improvement to existing dwellings.

Of the foregoing applications, 993 have been approved by the County Council for assistance. Of these, 101 applications have been withdrawn by the applicants, 10 in respect of loans and 91 in respect of grants. The total number of applications approved and not withdrawn is therefore 892.

Grants amounting to £67,308 have been approved by the County Council, and grants amounting to £45,266 have actually been paid up to date in respect of 633 completed dwellings. In the case of a further 111 dwellings, the work has been commenced but not yet finished.

A glance at the above figures will show, especially after comparing the report of the previous year, the extent of progress during the year. Actually some 250 applications were received during the year, compared with a total of 787 applications for the previous 10 years—the first application having been received in 1927. Grants approved by the County Council, amounted to approximately £20,000, compared with £47,000 approved in the 10 years previous. It is clear, therefore, that there has been a very marked speeding up in the number of applications for assistance under these Acts, which is very greatly to the benefit of our rural housing.

### **(B) WATER AND SEWERAGE.**

I am again much indebted to Dr. Towers for the preparation of the schedules showing the progress of the water and sewerage schemes throughout the County.

The general conditions governing grants by the County Council in respect of these schemes have been fully explained in previous reports, and these have not been altered.

The schedules contain much valuable information, and are worth careful study.

In all, up to the end of 1937, 106 applications for grants in aid have been received from Local Authorities—exclusive of a few applications in respect of schemes previously completed. Of the 106 applications, 22 were received during the year 1937. It will be noted that 16 out of the 22 applications in 1937 dealt with sewerage schemes. Twenty-one water schemes and 46 sewerage schemes have now been approved by the County Council for grant. Only one new water scheme was approved during the year. A certain number of the applications were deferred for further investigation. The total approximate estimated cost of the approved schemes to the end of the year is :—

Water—£184,000                      Sewerage—£155,000.

and of the adjourned schemes :—

Water—£73,000.                      Sewerage—£49,000.

These figures show a total estimated cost of £461,000 to the end of the year.

With regard to actual progress, a reference to the tables will show that 33 schemes are completed and 22 in progress—a total of 55 schemes completed or in progress, compared with 33 at the end of 1936, and compared with 8 at the end of 1935. The schedules which follow review the present position of all schemes submitted since the commencement of these schemes in 1934.

### TABLES.

**1.—NUMBER OF SCHEMES SUBMITTED TO THE COUNTY COUNCIL FOR GRANT-IN-AID.**

	1934.	1935.	1936.	1937.	Total
(a) Sewerage ..	17	15	17	16	65
(b) Water ..	22	4	9	6	41
	39	19	26	22	106



## 2.—RESULT OF APPLICATION TO COUNTY COUNCIL FOR GRANT.

	<i>Approved</i>	<i>Not Approved</i>	<i>Deferred for further consideration</i>	<i>Total</i>
(a) Sewerage ..	46	13	6	65
(b) Water ..	21	13	7	41
	67	26	13	106

## 3.—POSITION OF APPROVED SCHEMES.

	<i>Approved</i>	<i>Completed</i>	<i>In Progress</i>	<i>Not Com- menced</i>	<i>Abandoned, Deferred, etc., after Approval</i>
(a) Sewerage	46	19	18	7	2
(b) Water ..	21	14	4		3
	67	33	22	7	5

## 4.—POSITION OF DEFERRED SCHEMES.

	<i>Deferred</i>	<i>Abandoned</i>	<i>Remaining De- ferred for further con- sideration, etc.</i>
(a) Sewerage .. ..	6	1	5
(b) Water .. ..	7	2	5
	13	3	10

Progress of Sewerage Schemes submitted for  
Financial Assistance up to the end of 1936.

SUMMARY

Authority.	Ref. No.	Nature of Scheme.	If Approved by County Council.	Stage reached by end of 1937.	Remarks.	Year submitted.
ALSTON R.D.C.	S. 2	Sewerage and Sewage Disposal, NENTHEAD	Yes	In progress		1936
	S. 4	Do. ALSTON	Yes	In progress		1936
	S. 5	Do. GARRIGILL	Yes	In progress		1936
BORDER R.D.C.	S. 21	Do. LAVERSDALE	Yes	Completed		1934
	S. 24	Do. NEWBY	Yes	Completed		1934
	S. 23	Do. IRTINGTON	Yes	Not commenced		1934
	S. 53	Do. ARTHURET	No			1934
	S. 22	Do. FAUGH	No		Re-submitted 1937 in extended form q.v.	1934
	S. 52	Do. HETHERSGILL	Yes	Completed		1934
	S. 25	Do. LOW ROW	Deferred	Deferred		1934
	S. 133	Do. BURGH	Yes	In progress		1935
	S. 134	Do. CUMMERSDALE	Yes	Completed		1935
COCKERMOUTH R.D.C.	S. 117	Do. CAMERTON	Yes	Do.		1934
	S. 118	Do. DEANSCALES	Yes	Do.		1934
	S. 119	Do. BRAITHWAITE	Yes	Do.		1934
	S. 120	Do. BOTHEL	Yes	Do.		1934
	S. 121	Do. GREYSOUTHEN	Yes	Do.		1934
	S. 123	Do. DEARHAM	Yes	Do.		1935
	S. 147	Do. PAPCASTLE	Yes	Do.		1935
	S. 146	Do. EAGLESFIELD	Yes	Do.		1935
	S. 145	Do. PORTINSCALE	Yes	Do.		1935
	S. 124	Do. BIRKEY, &c.	Yes	Do.		1935
	S. 148	Do. BLINDCRANE	Yes	Do.		1936
	S. 149	Do. PLUMBLAND	Yes	Do.		1936
COCKERMOUTH U.D.C.	S. 106	Do. GOAL AREA	No			1936
ENNERDALE R.D.C.	S. 64	Do. GOSFORTH	Yes	In progress		1934
	S. 11	Do. ROWRAH, &c.	Deferred	Abandoned	Now included in S. 168 of 1937, q.v.	1934
	S. 65	Do. ST. BEES	Deferred	Deferred	Awaiting approval of Ministry of Health	1934
	S. 62	Do. CALDERBRIDGE	Yes	In progress		1934
	S. 69	Do. HAILE	Yes	Completed		1935
	S. 68	Do. WEDDICAR	Yes	Not commenced	(Tenders obtained)	1935
	S. 165	Do. EGRENONT	Deferred	Deferred	Awaiting approval of Ministry of Health	1935
KESWICK U.D.C.	S. 91	Storm Overflow and Filter Beds	No			1934
WIGTON R.D.C.	S. 79	Sewerage and Sewage Disposal THURSBY	Yes	In progress		1935
	S. 85	Do. HAYTON	Yes	Do.		1935
	S. 86	Do. BOLTON LOW HOUSES	Yes	Do.		1935
	S. 89	Do. WESTNEWTON	Yes	Do.		1936
	S. 170	Do. HOLME ABBEY	Yes	Do.		1936
	S. 171	Do. KIRKBRIDE	Yes	Do.		1936
	S. 172	Do. BLENNERHASSET	Yes	Do.		1936
PENRITH U.D.C.	S. 140	New Sewer Works to Augment Existing Scheme	Yes	Do.	Originally "not approved," re-considered	1935
MILLOM R.D.C.	S. 114	Sewerage and Sewage Disposal, THE HILL, MILLOM	Yes	Abandoned	Following on Clearance Order made	1935
	S. 183	Extension of HAVERIGG ROAD SEWER	Yes	Adjourned	Special Commissioner Refuses Grant	1936
	S. 180	Do. SEWER, MAINSGATE ROAD	No			1936
	S. 179	Drainage of CROOK POOL	No			1936
	S. 176	New Sewer at RAVENGLASS	No			1936
WHITEHAVEN M.B.	S. 192	Sewerage and Sewage Disposal, KILLS	No			1936
	S. 191	Do. SCILLY BANKS	No			1936
	S. 190	Do. HENSINGHAM	No			1936



**Progress of Sewerage Schemes submitted  
for Financial Assistance during  
1937.**

Authority.	Ref. No.	Nature of Scheme.	If Approved by C.C.	Estimated Capital Cost	Amount of C.C. Grant.	Stage reached by end of 1937.	Ref. to Minutes.	Remarks.
COCKERMOUTH R.D.C.	..S. 150	..Sewering VILLAGE OF GILCRUX ..	Yes	£4767	£954 Capital Grant or Equivalent	..In progress	..Vol. 49, p.p. 294, 782 ..	—
	S. 151	..Extending Sewer to BRIGHAM ..	Yes	£1732	£347 Do.	..Completed	..Vol. 49, p.p. 291, 782 ..	—
	S. 152	..New Works at BRIDEKIRK ..	Yes	£1428	£286 Do.	..Completed	..Vol. 49, p.p. 504, 784 ..	—
	S. 153	..Do. TALLANTIRE ..	Yes	£3028	£606 Do.	..In progress	..Vol. 49, p. 504 ..	—
	S. 154	..Do. LORTON ..	Yes	£6659	£1332 Do.	..In progress	..Vol. 49, p. 784 ..	—
	S. 155	..Sewerage and Works at PARDSHAW ..	Yes	£1425	£285 Do.	..In progress	..Vol. 49, p. 1,165 ..	—
	S. 156	..Do. ROSTHWAITE ..	Yes	£1950	£390 Do.	..Not commenced	..Vol. 49, p. 1,166 ..	—
	S. 157	..Do. STONETHWAITE ..	Yes	£2136	£427 Do.	..Not commenced	..Vol. 49, p. 1,166 ..	—
KESWICK U.D.C.	..S. 92	..New Works at HIGH BRIERY ..	No	£100	—	.. —	..Vol. 49, p. 293 ..	Scheme too small.
PENRITH R.D.C.	..S. 126	..Improving Disposal Works, LAZONBY ..	Deferred	£1730	—	..Deferred	..Vol. 49, p.p. 293, 789 ..	Ministry of Health deferred scheme.
WORKINGTON M.B.	..S. 81	..Sewerage System, STAINBURN ..	No	£5360	—	.. —	..Vol. 49, p. 295 ..	Too small a rate-charge involved.
BORDER R.D.C.	..S. 22	..Do. FAUGH ..	No	£1580	—	.. —	..Vol. 49, p. 502 ..	..Completed by R.D.C. without Grant. Slightly amended from S. 22 of 1934.
WIGTON R.D.C.	..S. 174	..Additional Plant, ASPATRIA ..	Yes	£800	£128 Capital Grant or Equivalent	..Not commenced	..Vol. 49, p.p. 508, 1,168 ..	—
	S. 175	..Sewerage Works, NEWTON ARLOSH ..	Yes	£4485	£840 Do.	..Not commenced	..Vol. 49, p. 790 ..	—
	S. 201	..Extension at PORT CARLISLE ..	Yes	£1620	£324 Do.	..Not commenced	..Vol. 49, p. 791 ..	—
ENNERDALE R.D.C.	..S. 168	..New Works ARLECDON AND FRIZINGTON ..	Deferred	£14800	—	..Deferred	..Vol. 49, p. 1,167 ..	—



Progress of Water Schemes submitted for  
Financial Assistance up to the end of 1936.  
SUMMARY.

Authority.	Ref. No.	Nature of Scheme.	If Approved by County Council.	Stage reached by end of 1937.	Remarks.	Year sub- mitted.
ALSTON R.D.C.	.. W. 3	..Supply to NENTHEAD AND GARRIGILL ..	Yes	..Completed ..		1934
BORDER R.D.C.	.. W. 28	..New Works at LANERCOST ..	Yes	..Completed ..		1934
	W. 132	..Supply to ARTHURET, ASKERTON, BEWCASTLE &C.	Yes	..In progress ..		1934
	W. 130	.. Do. RAUGHTON HEAD, DALSTON, &C.	Yes	..Abandoned ..	R.D.C. Declined Grant ..	1934
	W. 131	..Supply (Alternative) to KINGMOOR ..	No	.. — ..	Undertaken without Grant ..	1934
	W. 50	..Supply to KINKERY HILL ..	No	.. — ..		1934
	W. 51	.. Do. SCUGG GATE ..	No	.. — ..		1934
	W. 26	.. Do. ULLERBANK (Extended) ..	No	.. — ..		1934
	W. 135	.. Do. CUMREW ..	Yes	..Abandoned ..	W. 136 Substituted in 1937, q.v. ..	1936
COCKERMOUTH R.D.C.	.. W. 115.	.. Do. PARISH OF LORTON ..	Yes	..Completed ..		1934
	W. 116	.. Do. BOTHEL, REDMAIN, &C.	Yes	..Completed ..		1934
	W. 122	.. Do. PARISH OF WINSKALES ..	Yes	..Completed ..		1935
COCKERMOUTH U.D.C.	.. W. 105	..Improved Service to High Parts of Area ..	Deferred	..Abandoned ..		1934
ENNERDALE R.D.C.	.. W. 60	..Additional Main to GOSFORTH ..	Yes	..Abandoned ..	Need met by other means ..	1934
	W. 66	..Supply to MORESBY ..	Deferred	..Abandoned ..	Revised Scheme Awaited ..	1934
	W. 67	..Extension to ENNERDALE VILLAGE ..	Yes	..Completed ..		1935
	W. 166	..Supply to ARLECDON AND FRIZINGTON ..	Yes	..In progress ..		1936
WORKINGTON M.B.	.. W. 80	..Extension of Main ..	Yes	..Completed ..		1934
WIGTON R.D.C.	.. W. 77	..Supply to the HOLMES ..	Yes	..In progress ..		1934
	W. 45	..Extending Main, BLOOMING HEATHER ..	Yes	..Completed ..		1934
	W. 78	..Supply to PARISH OF WESTNEWTON ..	Yes	..Completed ..		1935
	W. 173	.. Do. AIKTON, WAVERTON, &C.	Yes	..Completed ..		1936
	W. 88	.. Do. LONGLANDS ..	No	.. — ..		1936
	W. 87	.. Do. CRANKLANDS ..	No	.. — ..		1936
KESWICK U.D.	.. W. 90	..Filtration Plant, &c. ..	No	.. — ..	Not the type of work to qualify for grant ..	1934
MILLOM R.D.C.	.. W. 112	.. Do. VILLAGE OF LADYHALL ..	Yes	..Completed ..		1934
	W. 111	.. Do. PARISH OF ESKDALE ..	Deferred	..Deferred ..		1934
	W. 110	..Renovating Works at DRIGG, &C. ..	No	.. — ..	Question of Maintenance ..	1934
	W. 113	..Supply to PARISH OF IRTON..	Yes	..Completed ..		1934
	W. 88	..Enlarging Pipe to DRIGG CAMP ..	No.	.. — ..	Scheme too small ..	1936
	W. 188	.. Do. SILECROFT CAMP ..	No	.. — ..	Do. ..	1936
	W. 177	..Extension of Main to THE GREEN ..	Deferred	..Deferred ..		1936
	W. 178	..Supply to BOOTLE, DRIGG, &C. ..	Deferred	..Deferred ..		1936
PENRITH U.D.C.	.. W. 125	..Extension, AINSTABLE, HESKET, DACRE, HUTTON, &C.	Yes	..Completed ..		1934
MARYPORT U.D.C.	.. W. 160	..New Main to FLIMBY ..	Yes	..Completed ..		1935





**Progress of Water Schemes submitted  
for Financial Assistance  
during 1937.**

<i>Authority.</i>	<i>Ref. No.</i>	<i>Nature of Scheme.</i>	<i>If Approved by County Council.</i>	<i>Estimated Capital Cost</i>	<i>Amount of C.C. Grant.</i>	<i>Stage reached by end of 1937.</i>	<i>Reference to Minutes.</i>	<i>Remarks</i>
ENNERDALE R.D.C.	..W. 167	..Extending Supply to PARTON ..	.. Deferred ..	£1050 ..	—	.. Deferred ..	.. Vol. 49, p. 292	..Special Commissioner Refuses Grant.
PENRITH R.D.C.	..W. 127	..Enlarging Tank at CULGAITH ..	.. No ..	£540 ..	—	.. — ..	.. Vol. 49, p. 293 ..	..Too Small a Rate Charge.
MILLOM R.D.C.	..W. 184	..Extending Supply to BOOTLE ..	.. No ..	£340 ..	—	.. — ..	.. Vol. 49, p. 295	.. Do. Do.
	W. 185	..Work on Mains at MILLOM WITHOUT ..	.. No ..	£210 ..	—	.. — ..	.. Vol. 49, p. 1,167	..Kind of Work not Suitable.
COCKERMOUTH R.D.C.	..W. 107	..Extending Urban Supply ..	.. Deferred ..	£11900 ..	—	.. Deferred ..	.. Vol. 49, p. 786	..Pending Views of Ministry.
BORDER R.D.C.	..W. 136	..Supply to CUMREW ..	.. Yes ..	£1775 ..	£225 Capital Grant or Equivalent	..In progress ..	.. Vol. 49, p. 780 ..	.. —



## INSPECTION AND SUPERVISION OF FOOD.

---

### FOODS OTHER THAN MILK.

A reference to Appendix " D " (the Report of the County Analyst) will show the work undertaken during the year in the chemical analysis of foods other than milk, for the purpose of ascertaining adulteration, if any.

### MILK.

In accordance with the usual custom, the Annual Report of the County Veterinary Services, in so far as these deal with milk and dairies and bovine tuberculosis, is included as an appendix to this Report. It is probably superfluous to point out that this will be the last occasion on which such a report will be included as an appendix to the report on the Health Services, as recent legislation which has transferred Veterinary Officers from the staffs of local authorities to the Ministry of Agriculture has created a new position.

I do not pretend to be fully conversant yet with the effects of the Agricultural Act, 1937, on the supervision and control of the milk supply. I do not know whether the exact position of the various bodies concerned is even yet quite fully defined. The position, however, so far as I understand it, is that in the main the supervision and control of the herds themselves will rest with the officers of the Ministry of Agriculture; matters affecting the premises and methods of production will, in the main, together with the registration of milk producers and premises, and milk sampling of non-graded herds, rest with Local Sanitary Authorities, and the co-ordination of milk sampling and the issue of licences for graded herds will rest with the County Council. How this triangular arrangement will function remains to be seen.

It seems, I think, clear that so far as County Councils are concerned, the position will not be free from difficulty. County Councils apparently will still be the channels through which complaints from other authorities with reference to tuberculous or unclean milk will be made, but County Councils, having no longer any officers of their own - unless they have appointed such officers specifically for this purpose - will no longer be in the position of being able to *directly* investigate

such complaints. County Councils, while continuing to be the channel of complaint, will now have to depend on other bodies, namely, the Ministry of Agriculture and Local Sanitary Authorities, for their investigation. This is obviously not a good arrangement.

In the matter of the issue of licences, too, the County Council is placed in a difficult position by the Act. The interests of the public must be safeguarded, but justice to the producer, in (a) not unreasonably withholding or (b) in not unreasonably withdrawing licences to produce one or other of the grades of milk, must also be safeguarded. All that the County Council will have *directly* available will be the laboratory report on the result of the examination of samples. But other most important factors enter into the question. There is the personal equation, whether the producer is careful or otherwise, and anxious to improve his standard of milk production—whether he is hampered by adverse circumstances. These things, together with what may be called the history of the individual herds, and expert opinion on the premises and methods of production, will only in future be available to the authority issuing licences through the channel of communication with other departments. Much of this is a matter of *personal knowledge and contact and not something which can be dug out of a card index.*

On the face of it, it seems rather a cumbersome procedure. I have heard it described as “patchwork legislation.” It is rather analogous to the position created by the Midwives Act, 1936, in Boroughs where the Local Authority is also a Maternity and Child Welfare Authority, where the supervision of midwives is the duty of the County Council, and where the ante-natal care of the mother is the duty of the Local Authority. It is difficult to understand the trend of recent legislation in matters like these, whereby the maximum of simplicity in administration hardly seems to have been attained.

With reference to milk in general, the question of the scheme for the provision of cheap milk to school children, initiated by the Milk Marketing Board, is dealt with in the Report on the School Medical Service. The problem of extending the scheme to nursing and expectant mothers and young children has been referred to elsewhere in this Report, as has the extent of the County Council's Scheme for the provision of free milk in necessitous cases.

## **CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.**

The chemical analysis of milk, other foods and water, required by the County Council, is undertaken by the County Analyst at his laboratory at Darlington. The bacteriological examination of milk and water is undertaken at the Pathological Department of the Cumberland Infirmary. Occasionally also bacteriological examinations of samples of other foods—for example shell-fish for sewage contamination—are undertaken for the County Council at the Cumberland Infirmary Pathological Department.



## PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

---

No epidemic of a serious nature occurred during the year. Considerably more cases of scarlet fever were notified than for the previous year, but the total was still below the average. There was a very substantial fall in the number of cases of diphtheria. It may be that the policy of immunization which is being adopted by one or two of the sanitary areas is gradually beginning to have some effect. The table which is included in this section of the report showing the notifications of infectious diseases by districts, shows that there was no district outstanding so far as the more important notifiable diseases were concerned, except that about three-quarters of the cases of enteric fever occurred in the Border Rural District.

There was during the year an epidemic of influenza in the early part of the year, which occasioned the closure of 200 schools. There was also a small epidemic of infantile paralysis, which has been referred to elsewhere.

The position compared with previous years with regard to the commoner diseases is set out below :—

### SCARLET FEVER.

In 1931	there were	200	cases with	1	death
In 1932	„ „	186	„ „	1	death
In 1933	„ „	278	„ „	0	deaths
In 1934	„ „	291	„ „	0	deaths
In 1935	„ „	387	„ „	2	deaths
In 1936	„ „	152	„ „	0	deaths
In 1937	„ „	248	„ „	1	death

### DIPHTHERIA.

In 1931	there were	93	cases and	5	deaths
In 1932	„ „	47	„ „	4	deaths
In 1933	„ „	65	„ „	7	deaths
In 1934	„ „	118	„ „	8	deaths
In 1935	„ „	223	„ „	19	deaths
In 1936	„ „	332	„ „	18	deaths
In 1937	„ „	151	„ „	8	deaths

**ENTERIC FEVER.**

In 1931	there were	9	cases and	2	deaths
In 1932	" "	14	" "	1	death
In 1933	" "	7	" "	1	death
In 1934	" "	6	" "	3	deaths
In 1935	" "	10	" "	4	deaths
In 1936	" "	15	" "	2	deaths
In 1937	" "	17	" "	3	deaths

**CEREBRO-SPINAL FEVER.**

During the year there was one notified case in the Border Rural District, which recovered. One case notified in 1936, in the Whitehaven Borough, died in 1937. One case (unnotified) died in the Millom Rural District.

**NON-NOTIFIABLE DISEASES.****MEASLES.**

In 1931	there were	20	deaths
In 1932	" "	11	deaths
In 1933	" was	1	death
In 1934	" were	16	deaths
In 1935	" "	4	deaths
In 1936	" "	6	deaths
In 1937	" "	8	deaths

**WHOOPING COUGH.**

In 1931	there were	19	deaths
In 1932	" "	9	deaths
In 1933	" "	21	deaths
In 1934	" "	17	deaths
In 1935	" "	10	deaths
In 1936	" "	3	deaths
In 1937	" "	6	deaths

**DIARRHOEA.**

In 1931	there were	15	deaths in children under 2 years
In 1932	" "	16	" " " "
In 1933	" "	19	" " " "
In 1934	" "	16	" " " "
In 1935	" "	10	" " " "
In 1936	" "	18	" " " "
In 1937	" "	16	" " " "

In view of the fact that the Isolation Hospital Accommodation question is still under review, I have continued the table first included in this Report 12 months ago, showing the notifications of the commoner diseases by districts. This table is exclusive of notifications of puerperal fever and pyrexia, and ophthalmia neonatorum, which are dealt with in other sections of this Report.

NOTIFICATIONS OF CASES OF INFECTIOUS DISEASES IN THE COUNTY OF CUMBERLAND DURING THE YEAR 1937.  
(4th January, 1937, to 2nd January, 1938).

DISTRICT	Scarlet Fever	Diphtheria	Enteric Fever	Paratubercular	Pneumonia	Polio- myelitis	Ery- sipelas	Chicken- pox	Cerebro- Spinal	
									Fever	Encephalitis Lethargica
Workington M.B.	36	28	1	1	15	—	16	57	—	—
Whitehaven M.B.	7	24	1	1	24	—	11	9	—	—
Cockermouth U.	—	—	—	—	—	—	—	—	—	—
Keswick U.	3	—	—	—	3	—	—	—	—	—
Maryport U.	20	8	1	2	2	—	4	—	—	—
Penrith U.	22	8	—	—	16	3	5	—	—	—
Alston R.	12	—	—	—	3	—	5	—	—	—
Border R.	40	5	9	6	25	2	10	—	1	—
Cockermouth R.	28	12	4	1	11	—	5	—	—	—
Ennerdale R.	26	31	—	—	46	—	18	5	—	—
Millom R.	14	10	1	1	24	1	3	—	—	—
Penrith R.	4	—	—	—	16	3	1	—	—	1
Wigton R.	36	25	—	—	23	—	15	—	—	—
TOTALS	248	151	17	12	208	9	93	71	1	1
1936..	152	332	15	2	199	—	92	77	3	1

The Medical Officer of Health for the Wigton Rural District has inaugurated in his area a very interesting scheme of co-operation with the general practitioners in the area, for the ascertainment of the incidence of non-notifiable infectious diseases. I have Dr. Simpson's permission to include this Table in my Report, and in view of the great interest of the figures, I am very glad to do this. The Table covers the period February, 1937, to January, 1938, both months inclusive, and is a return made by general practitioners in the Wigton Rural District of non-notifiable infectious diseases.

#### WIGTON RURAL DISTRICT.

<i>Disease</i>	<i>Feb.</i>	<i>Mar.</i>	<i>Apr.</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Jan.</i>	<i>Total</i>
Measles..	--	—	2	2	3	1	12	2	4	12	146	330	514
Who'ping Cough	19	17	2	13	2	4	9	5	2	4	2	2	81
Chicken- pox ..	6	1	6	2	18	8	12	12	10	12	12	1	100
Mumps	—	—	—	1	—	3	3	2	1	2	3	—	15
Influenza	734	62	17	9	3	—	—	3	30	100	110	180	1248

The importance of the table lies in the fact that the average annual death-rate among children from the complications of measles and whooping cough is of infinitely greater significance than the deaths from the other infectious diseases, such as scarlet fever, diphtheria and enteric fever, which, as I have often pointed out in previous reports, are the diseases generally admitted to isolation hospitals in this area.

The total number of deaths from scarlet fever for the eleven years, 1926-1936 inclusive, was 13. The number of deaths from diphtheria for the same period was 124, and from enteric fever 23. On the other hand, in the same period, the deaths from measles and whooping cough have been 333, while the deaths from diarrhoea in infants have been 225. The total number of deaths (all ages) from influenza and pneumonia, for the same period have amounted to 2,501.

It is well-known that pneumonia as a cause of death is closely linked up with measles, whooping cough and influenza, and for this reason the figures given by the Medical Officer of Health for the Wigton Rural District showing the incidence of these diseases are of great significance.

Once again I make the annual plea for a genuine policy covering the whole area for the admission of complicated cases of measles, whooping cough and influenza to the empty beds in our isolation hospitals.

### VACCINATION.

This subject is dealt with in the usual way by the Vaccination Officer (see Appendix " B "). Nothing calling for special comment has arisen during the year.

### PREVENTION OF BLINDNESS.

During the year 66 cases were examined by Ophthalmic Surgeons under the Prevention of Blindness Scheme. Of these cases 5 received operative treatment, 7 other forms of treatment, and in 43 cases glasses were provided. In 9 cases the condition was not amenable to treatment of any kind. In 3 of the cases blindness was due to tobacco.

With regard to ophthalmia neonatorum, 20 cases were notified during the year—of these 7 were treated in Carlisle City General Hospital under the immediate care of Dr. Ross. Statistics relative to ophthalmia neonatorum during the year are as follows :—

Cases Notified .. .. .	20
Cases Treated :—	
At Hospital .. .. .	7
At Home .. .. .	13
Vision Unimpaired .. .. .	20
Vision Impaired .. .. .	—
Total Blindness .. .. .	—
Deaths .. .. .	—

### CANCER.

The total number of deaths from cancer during the year was 309.

The age and sex distribution of the deaths, and the aggregate of the Urban and Rural areas are set out in the tables which follow. During the year nine cases were sent under the County scheme to the Manchester Radium Institute for investigation and treatment. Of these, six were retained as in-patients. Five cases were admitted for deep X-ray therapy to the Edinburgh Royal Infirmary.

The number of cases admitted for treatment from the Administrative County to the Cumberland Infirmary remained approximately the same as the previous year.

The whole question of the cancer problem in this area was the subject of a very full report twelve months ago, and nothing new has arisen during the year calling for special comment.

## CANCER DEATHS DURING 1937—BY AGE GROUPS.

	5-15		15-25		25-35		45-55		55-65		65-75		75 & Over		All Ages		T'tl
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Urban ..																	
Districts ..	1	—	—	—	1	5	6	7	21	13	24	14	12	13	65	52	117
Rural ..																	
Districts ..	—	—	3	1	2	8	9	15	18	21	37	33	21	24	90	102	192
Whole County	1	—	3	1	3	13	15	22	39	34	61	47	33	37	155	154	309

## CANCER DEATHS DURING 1937—BY SANITARY DISTRICTS.

	Males	Females	Total
URBAN DISTRICTS.			
Cockermouth .. ..	6	3	9
Keswick .. ..	4	5	9
Maryport .. ..	7	8	15
Penrith .. ..	10	8	18
Whitehaven .. ..	20	15	35
Workington .. ..	18	13	31
Aggregate of Urban Districts .. ..	65	52	117
RURAL DISTRICTS.			
Alston .. ..	1	1	2
Border .. ..	16	21	37
Cockermouth .. ..	15	16	31
Ennerdale .. ..	30	29	59
Millom .. ..	3	10	13
Penrith .. ..	11	12	23
Wigton .. ..	14	13	27
Aggregate of Rural Districts .. ..	90	102	192
Whole County .. ..	155	154	309



### TUBERCULOSIS.

The number of new cases of pulmonary tuberculosis notified as primary notifications during the year amounted to 179—practically the same figure as for 1936. Non-pulmonary notifications at 82 also remain practically the same. In addition, 37 new cases came to notice in other ways. Of these, 30 were pulmonary and 7 non-pulmonary. The comparison between the primary notifications for 1937, and those for previous years is shown in the following table :—

**Table A.—NOTIFICATIONS.**

			Pulmonary.			Non-Pulmonary.
1928	..	..	200	..	..	88
1929	..	..	235	..	..	73
1930	..	..	213	..	..	95
1931	..	..	246	..	..	94
1932	..	..	190	..	..	95
1933	..	..	252	..	..	96
1934	..	..	193	..	..	104
1935	..	..	202	..	..	70
1936	..	..	176	..	..	85
1937	..	..	179	..	..	82

Increasingly, primary notifications, at least of pulmonary cases, is deferred by the medical practitioners concerned until the patient has been examined by a medical board of Tuberculosis Officers and X-rayed and the sputum examined.

The total deaths from tuberculosis are shown in the following table :—

**TABLE B.—DEATHS.**

			Pulmonary.			Non-Pulmonary.
1928	..	..	146	..	..	27
1929	..	..	138	..	..	40
1930	..	..	133	..	..	23
1931	..	..	165	..	..	30
1932	..	..	142	..	..	47
1933	..	..	144	..	..	44
1934	..	..	138	..	..	47
1935	..	..	124	..	..	31
1936	..	..	112	..	..	34
1937	..	..	123	..	..	35

The death-rate from pulmonary tuberculosis on the Registrar General's figures for the Administrative County was .80 per thousand population.

Arranged in order of pulmonary tuberculosis death-rates, the Sanitary Districts stand as follows :—

URBAN DISTRICTS.						<i>Deaths.</i>	<i>Death Rate.</i>
Whitehaven	..	..	..	..	..	20	.88
Maryport	..	..	..	..	..	9	.78
Workington	..	..	..	..	..	21	.76
Penrith	..	..	..	..	..	7	.75
Cockermouth	..	..	..	..	..	3	.62
Keswick	..	..	..	..	..	2	.45
Aggregate of Urban Districts .. ..						62	.78
RURAL DISTRICTS.							
Ennerdale	..	..	..	..	..	25	.97
Penrith	..	..	..	..	..	1	.88
Millom	..	..	..	..	..	9	.77
Alston	..	..	..	..	..	1	.42
Border	..	..	..	..	..	10	.39
Cockermouth	..	..	..	..	..	7	.39
Wigton	..	..	..	..	..	8	.38
Aggregate of Rural Districts .. ..						61	.52

With regard to unnotified deaths, 73, being the same figure as for 1936, did not come to our notice within three months of death or after death. As the total number of deaths is substantially higher than the previous year, this means that relatively fewer cases were un-notified until a late stage of the disease.

Our bed provision has remained more or less the same during the year. On the average, rather more cases have been sent to Meathop Sanatorium than the previous year, and additional beds have also been utilised for children at Stannington Sanatorium. The position of course varies from time to time, but, generally speaking, it has been possible to obtain admission for all cases recommended for sanatorium or hospital within, at the outside six weeks from the date of being recommended for sanatorium.

During the year, the accommodation occupied at the different institutions was approximately as follows :—

## PULMONARY TUBERCULOSIS.

				Beds.
At Blencathra Sanatorium	..	..	..	38
At Meathop Sanatorium	..	..	..	20
At Stannington Sanatorium	..	..	..	23
At Eastby Sanatorium	..	..	..	5

In addition to the above, casual cases have been admitted to other institutions. Our average bed accommodation for all classes of tuberculosis has risen by something like five beds during the year.

## THE YEAR'S WORK.

The total number of cases treated in institutions was as follows :—

	M.	F.	Total
Adults in Blencathra and Meathop	79	..	108
Children in Stannington and Eastby	53	..	30
	—	—	270
Orthopædic Cases in the Ethel Hedley Hospital and Shropshire Orthopædic Hospital	..	..	28
Other Institutions	..	..	7
	..	..	15— 22

It may be interesting to compare the admissions of pulmonary cases (these are our chief problem) with the admissions for previous years :—

1933	..	..	..	..	..	115
1934	..	..	..	..	..	172
1935	..	..	..	..	..	221
1936	..	..	..	..	..	264
1937	..	..	..	..	..	270

A glance at this table will demonstrate how rapidly our admissions have risen, and, on the face of it, the admission of 270 pulmonary cases, compared with 179 primary notifications, appears to be reasonably satisfactory, but there are on our dispensary registers at any time a substantial number of cases requiring sanatorium treatment, apart from new cases, and therefore the figure of admissions is not so impressive as it would seem at first sight. Sanatorium cases continue to remain longer in the sanatoria than used to be the case, so that the total number of patient days under treatment is enormously higher than it was a few years ago.

On the non-pulmonary side, adequate accommodation is available at the various orthopædic hospitals to which we send our cases, and there is no real difficulty in getting beds for new cases at short notice.

The position with regard to advanced cases unfortunately remains unchanged. We have no adequate accommodation—in fact we are hardly in a position to deal with such cases at all. There is no reasonable prospect of a solution of this problem until and unless the proposal to erect a County Sanatorium reasonably accessible to the homes of these persons becomes effective. *We continue to live in a vicious circle in this respect.* These advanced cases are the chief source of infection for new cases, and so long as they remain in their often insanitary and overcrowded homes, *there is no hope whatever* that our notification figure of new cases will show any decline. This is, of course, an extremely unsatisfactory state of affairs. The advanced cases create new cases among their contacts with monotonous regularity.

The number of new cases examined at the Dispensaries was 279, a substantially higher figure than for the previous year. The number of contacts examined was 706, which is rather lower. The number of cases on the Dispensary Registers at the end of the year rose from 733 to 793. The number of consultations with practitioners remained approximately the same at 187. The number of visits by members of the nursing staff to the homes of tuberculous patients was 2,058. Sputum examinations were carried out in 305 cases, and X-ray examinations amounted to 83. These figures show little variation from the previous year. Attendances at the Dispensaries amounted to 3,479, being a substantial increase on the previous year. The Tuberculosis Medical Board has held 14 sessions at different centres, and the Board have examined and reported on 115 selected cases. As in previous years, a considerable number of cases were examined for the Public Assistance Committee in respect of extra nourishment.

With regard to surgical treatment, 19 cases of pulmonary tuberculosis had surgical treatment of one kind or another. A certain amount of artificial pneumothorax treatment with refills was carried out at Meathop and at Blencathra, but if refill treatment were available at some more accessible centre, it would be a very great advantage. A certain number of cases of tuberculosis of the larynx and kidney were dealt with during the year. During the year 40 patients had the use of shelters issued to them by the County Council. Extra nourishment was granted in 138 cases, apart from grants from the Public Assistance Committee.

# **PUBLIC HEALTH ACT, 1925, SECTION 62.**

No action was taken under this Section for the compulsory removal to Hospital of any person suffering from tuberculosis, nor under the Public Health (Prevention of Tuberculosis) Regulations in relation to persons suffering from tuberculosis employed in the milk trade.

The usual statistics follow :—

## **PARTICULARS OF NEW CASES OF TUBERCULOSIS AND OF ALL DEATHS FROM THE DISEASE IN THE AREA DURING 1937.**

NEW CASES.							DEATHS.				
AGE PERIODS.	Respiratory		Non-Respiratory				Respiratory		Non-Respiratory		
	M.	F.	M.	F.			M.	F.	M.	F.	
0—	..	—	—	..	1	2	—	—	..	1	—
1—	..	4	1	..	12	11	—	—	..	5	5
5—	..	13	18	..	13	11	1	2	..	3	1
15—	..	22	36	..	9	14	15	22	..	1	6
25—	..	14	31	..	5	2	10	11	..	4	2
35—	..	13	11	..	2	2	9	9	..	—	2
45—	..	15	6	..	2	1	16	5	..	2	1
55—	..	11	9	..	—	1	9	4	..	1	—
65 and upwards..	..	3	2	..	1	—	7	3	..	1	—
Totals	..	95	114	..	45	42	67	56	..	18	17

TUBERCULOSIS SCHEME OF THE CUMBERLAND COUNTY  
COUNCIL.

Return for the Year 1937.

(A) Return showing the work of the Dispensaries.

[illegible]



7. Number of consultations with medical practitioners :—	
(a) Personal .. .. .	65
(b) Other .. .. .	109
8. Number of visits by Tuberculosis Officers to homes (including personal consultations) .. .. .	248
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes .. .. .	2058
10. Number of :—	
(a) Specimens of sputum, etc., examined .. .. .	305
(b) X-ray examinations made .. .. . in connection with Dispensary work	83
11. Number of " Recovered " cases restored to Dispensary Register, and included in A (a) and A (b) above ..	2
12. Number of " T.B. plus " cases on Dispensary Register on December 31st .. .. .	205

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council .. .. .	11
Provided by Voluntary Bodies .. .. .	Nil.

(C) Number of beds available for the treatment of Tuberculosis on 31st December in Institutions :—

Belonging to the Council—Nil.

Provided by Voluntary Associations :—

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children. under 15.	Adults.	Children. under 15.	
Blencathra Sanatorium ..	38	—	—	—	38
Stannington Sanatorium ..	—	20	—	3	23
Westmorland Sanatorium ..	20	—	—	—	20
Eastby Sanatorium ..	—	5	—	—	5
Shropshire Orthopaedic Hospital ..	—	—	10	2	12
Ethel Hedley Hospital, Windermere ..	—	—	—	12	12

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

NUMBER OF DOUBTFULLY TUBERCULOUS CASES ADMITTED FOR OBSERVATION—

	In Institu- tions on Jan. 1st.	Admitted during the year.	Dis- charged during the year	Died in the Insti- tutions.	In Institu- tions on Dec. 31st.
Adult Males ..	3	10	11	—	2
Adult Females ..	8	16	19	—	5
Children ..	25	35	43	1	16
Total ..	36	61	73	1	23

NUMBER OF PATIENTS SUFFERING FROM PULMONARY TUBERCULOSIS—

	In Institu- tions on Jan. 1st.	Admitted during the year.	Dis- charged during the year	Died in the Insti- tutions.	In Institu- tions on Dec. 31st
Adult Males ..	17	53	39	10	21
Adult Females ..	29	66	63	3	29
Children ..	8	21	16	1	12
Total ..	54	140	118	14	62

NUMBER OF PATIENTS SUFFERING FROM NON-PULMONARY TUBERCULOSIS

	In Institu- tions on Jan. 1st.	Admitted during the year.	Dis- charged during the year.	Died in the Insti- tutions.	In Institu- tions on Dec. 31st.
Adult Males ..	4	10	8	1	5
Adult Females ..	5	7	6	2	4
Children ..	10	14	8	1	15
Total ..	19	31	22	4	24
Grand Total ..	109	232	213	19	109

(E) Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

NIL.

(F) Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals.							
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.										
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.					
Tuberculous	—	—	—	..	4	9	18	..	—	—	1	..	2	1	2	..	6	10	22	
Non-tuberculous	1	1	6	..	1	6	13	..	2	2	1	..	1	—	2	..	5	9	22	
Doubtful	..	—	—	..	—	—	1	Dead	—	—	..	—	—	—	..	—	—	—	—	
Totals ..	..	1	1	6	..	5	15	32	..	2	2	2	..	3	1	4	..	11	19	44

(G) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution.		Condition at time of Discharge	Duration of Residential Treatment in the Institution.															Grand Totals
			Under 3 months. (but exceeding 28 days).			3—6 months			6—12 months			More than 12 months.			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus	Quiescent ..	1	4	..	3	1	3	..	..	6	..	..	1	4	5	10	19
		Not quiescent	3	..	1	..	..	1	..	..	1	..	1	1	3	1	4	8
		Died in Institution ..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	..	2
	Class T.B. plus Group I.	Quiescent ..	..	..	..	2	2	..	2	2	..	..	1	..	4	5	..	9
		Not quiescent	4	11	..	5	8	..	5	9	..	..	2	..	14	30	..	44
	Class T.B. plus Group II.	Died in Institution ..	..	..	..	..	..	1	1	..	..	1	..	..	2	..	1	3
		Quiescent ..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
	Class T.B. plus Group III.	Not quiescent ..	2	5	..	2	5	..	2	..	..	..	..	..	6	10	..	16
		Died in Institution ..	1	..	..	3	..	..	..	..	..	..	..	..	4	..	..	4
	Class T.B. plus Group III.	Quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Not quiescent	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..	2
	Class T.B. plus Group III.	Died in Institution	2	..	..	..	..	..	..	1	..	..	..	..	2	1	..	3
		Totals (pulmonary)	13	20	1	17	19	5	10	12	7	1	4	2	41	55	15	111
NON-PULMONARY TUBERCULOSIS.	Bones and Joints	Quiescent .. ..	..	..	..	1	..	1	2	..	..	1	1	2	4	1	3	8
		Not quiescent ..	..	..	..	2	..	..	1	..	..	..	2	..	3	2	..	5
		Died in Institution ..	..	..	..	..	1	..	1	..	..	..	..	..	1	1	..	2
	Abdominal.	Quiescent .. ..	..	..	..	2	..	1	..	..	1	..	..	..	2	..	2	4
		Not quiescent	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	2
	Other Organs.	Died in Institution ..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	1	2
		Quiescent .. ..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
	Peripheral glands.	Not quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Died in Institution ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Peripheral glands.	Quiescent .. ..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	2
		Not quiescent ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Peripheral glands.	Died in Institution ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
		Totals (non-pulmonary)	1	2	2	6	1	3	4	..	1	1	3	2	12	6	8	26

## PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

PART I.—Summary of Notifications during the period from the 1st January, 1937, to the 31st December, 1937, in the area of the County of Cumberland.

## FORMAL NOTIFICATIONS.

*Number of Primary Notifications of New Cases of Tuberculosis.*

Age Periods.	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total (all ages).	Total Notifi- cations.
<b>Pulmonary—</b>													
Males ..	..	—..	4..	7..	6..	11..	10..	12..	13..	13..	8..	2..	86 .. 87
Females ..	..	—..	1..	8..	9..	15..	14..	27..	10..	3..	5..	1..	93 .. 94
<b>Non-pulmonary—</b>													
Males ..	..	1..	10..	8..	4..	5..	3..	4..	2..	2..	—..	1..	40 .. 41
Females ..	..	2..	11..	5..	5..	8..	5..	2..	2..	1..	1..	—..	42 .. 43

## SUPPLEMENTAL RETURN.

PART II.—New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age Period,	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total
<b>Pulmonary—</b>												
Males ..	..	—..	—..	—..	—..	1..	2..	—..	2..	3..	1..	9
Females	..	—..	—..	1..	—..	—..	7..	4..	1..	3..	4..	21
<b>Non-pulmonary—</b>												
Males ..	..	—..	2..	1..	—..	—..	1..	1..	—..	—..	—..	5
Females	..	—..	—..	1..	—..	1..	—..	—..	—..	—..	—..	2

No. of Cases.

Source of Information.	Pulmonary.	Non- Pulmonary.
------------------------	------------	--------------------

<b>Death Returns—</b>			
From Local Registrars .. .. .	8	..	4
Transferable Deaths from Registrar-General .. .. .	2	..	—
Posthumous Notifications .. .. .	3	..	2
" Transfers " from other areas (other than transferable deaths) .. .. .	17	..	1
Other Sources .. .. .	—	..	—

## PART III..

## NOTIFICATION REGISTER.

	Pulmonary.			Non-pulmonary.			Total Cases.
	M.	F.	Total	M.	F.	Total	
Number of cases of tuberculosis remaining at the 31st December, 1937, on the Registers of Notifications kept by District Medical Officers of Health in the County .. .. .	398..	445..	843..	182..	204..	386..	1229
Number of cases removed from the Registers during the year by reason <i>inter alia</i> of :—							
1. Withdrawal of notification .. .. .	4..	2..	6..	4..	3..	7..	13
2. Recovery from the disease .. .. .	6..	13..	19..	15..	19..	34..	53
3. Death .. .. .	73..	60..	133..	18..	19..	37..	170
4. Otherwise .. .. .	15..	25..	40..	2..	13..	15..	55

APPENDIX "A."

---

**ANNUAL REPORT**

OF THE

**ASSISTANT MEDICAL OFFICER**

(VENEREAL DISEASES).

A. C. B. McMURTRIE, M.C., M.D., F.R.C.S.E., D.P.H.,

For the Year 1937.

---



## **PUBLIC HEALTH (VENEREAL DISEASES) REGULATIONS 1916.**

---

### **REPORT OF THE ASSISTANT MEDICAL OFFICER OF HEALTH (VENEREAL DISEASES) FOR THE YEAR ENDED 31st DECEMBER, 1937.**

---

During the year 616 persons were dealt with at the Treatment Centres at Carlisle and Whitehaven, of whom 176 were attending in 1936, 27 were re-admitted suffering from the same infection and 413 were new. This shows an increase of 23 in the number of new patients compared with the previous year.

One-hundred-and-fifty-two of these were not suffering from Venereal Disease, leaving 464 cases of Venereal Disease under treatment or observation, a decline of 7 compared with the year 1936.

The attendances at the Medical Officer's Clinics were 4,230, a decrease of 344. This is largely accounted for by the smaller number of new cases of Gonorrhœa in the Male (12 less than in the previous year) and also by the shorter duration of treatment and comparative freedom from complications of Gonorrhœa, since the introduction of the new drug Sulphanilamide. Reference to this is made later in this report.

The total attendances were 7,376, a decrease of 2,125, compared with the year 1936, in which the prevalence of Gonorrhœa was alarming, and about the same as in 1935. A further decrease may be anticipated in 1938.

**AREAS IN WHICH PATIENTS RESIDED.**

County County Borough, or Country.	New cases (excluding those previously treated at other Centres).					Attendances all Cases.
Cumberland .. ..	203	2287				
Carlisle .. ..	131	4648				
Westmorland .. ..	22	180				
Scotland .. ..	14	181				
Co. Durham .. ..	1	3				
Southampton .. ..	—	9				
Darlington .. ..	1	5				
London .. ..	1	12				
Lancashire .. ..	2	5				
West Riding .. ..	—	4				
Liverpool .. ..	—	3				
Glamorgan .. ..	1	1				
Leeds .. ..	1	1				
Manchester .. ..	—	8				
Bradford .. ..	—	1				
Northumberland .. ..	3	20				
Denmark .. ..	—	2				
Newcastle-on-Tyne .. ..	—	1				
Cheshire .. ..	—	1				
Bury .. ..	1	1				
East Riding .. ..	1	1				
Norway .. ..	1	1				
Newfoundland .. ..	—	1				
	383	7376				

**PATHOLOGICAL EXAMINATIONS.**

Wassermann and other blood serum tests were carried out at the Manchester Public Health Laboratory.

Four-hundred-and-four Wassermann tests were done for patients attending the clinics, and 55 for patients under private treatment by practitioners in Cumberland and Carlisle. This shows a decrease of 19 at the Clinics.

One-hundred-and-seventy-three Complement Fixation tests for Gonorrhœa were done for the Clinics, an increase of 48, as this test is being found to be of more value each year, and 12 were done for practitioners.

One-hundred-and-eighty-five microscopical tests were done at the treatment centres, and 424 at the Cumberland Pathological Laboratory. In addition, 19 culture tests were done at the latter, and 11 microscopical tests for practitioners.

### **APPROVED ARSENOBENZENE COMPOUNDS.**

These were supplied free on application to any practitioner on the approved list, and during the year 10 doses were issued in this way.

At the treatment centres 1,163 doses were given, and in addition, 112 doses of other arsenical compounds.

This is practically the same as in 1936.

The following approved compounds were in use at the Clinics :—

Neokharsivan	Kharsulphan
Noversenobillon	Silver Salvarsan
Sulfarsenol	

Other compounds in use were :—

Tryparsamide	Biarsamide
--------------	------------

### **THE INTRODUCTION OF SULPHANILAMIDE.**

This new drug came into general use in 1936 for the treatment of Streptococcal infections, and the results in many cases proved to be almost miraculous. It was later found to be of use in combating other bacteria, but was unfavourably reported on for the treatment of Gonorrhœa. This erroneous impression appears to have been made as the result of giving the drug in too small doses, and of continuing the treatment too short a time.

In consequence of these reports Sulphanilamide was not in use in the V.D. Clinics in Cumberland until October, 1937.

It has been found that comparatively large doses are necessary, and that treatment must be continuously carried out over a period of about three weeks in order to be fully effective. As the drug is definitely toxic, this prolonged treatment is not entirely without risk. Fortunately any signs of poisoning rapidly pass off as soon as the treatment is stopped and no serious cases have so far occurred at either treatment centre. A typed slip giving special instructions is given to each patient under treatment as a precaution.

It has also been found that, in addition to the Sulphanilamide tablets, which are swallowed, the usual local treatment must be carried out. Hence the need for irrigation treatment

of both sexes still exists, though the average duration of such treatment is considerably less.

The results have been most astonishing. Quite often all signs of the disease disappear in a few hours; in other cases it may take a few days. This, of course, gives great relief to mind and body, but does not imply that cure is effected. What is of far greater importance is that the common complications of Gonorrhœa do not occur once the patient is under the influence of this drug.

Another most remarkable and unexpected feature of this treatment is that chronic and apparently incurable cases frequently clear up quite as quickly as recent infections.

The exact way in which the drug acts is still in doubt, but it appears to have a direct bactericidal effect on the *Gonococcus*. The germ disappears in a few hours as a rule. Occasionally relapses have occurred after treatment, but in nearly all of these the treatment was for some reason or other not carried out in its entirety. In such cases recourse is had to the older methods.

We are informed that the number of possible variations in the molecular composition of the chemical group, to which Sulphanilamide belongs, amounts to several hundreds. So it is possible that an improved variety, equally effective but less toxic, may be at our disposal before long.

It is difficult to predict what the ultimate result of the use of this drug on the prevalence of Gonorrhœa will be. There are two opposite views.

On one hand the treatment being so simple it lends itself to abuse in unskilled hands. Consequently a large number of people only partially treated and never subjected to any tests for cure will be at large, spreading infection here, there and everywhere, and the incidence of Gonorrhœa will go up by leaps and bounds.

On the other hand we have now a drug which is a real specific in the treatment of Gonorrhœa. With proper care and attention a quick and certain cure can usually be effected. In its action it is comparable to the Arsenobenzene treatment of Syphilis, with the difference that treatment is so very much shorter.

Syphilis is dying out in this country as a direct result of the ease with which efficient treatment may be obtained, and it is reasonable to expect that the same will happen to Gonorrhœa.

## THE TREATMENT CENTRE AT THE CUMBERLAND INFIRMARY.

Clinics were held by the Medical Officer, as in previous years, on three days a week (five sessions), and, in addition, the premises were open daily for the Intermediate treatment of patients of either sex, under the supervision of the Medical Orderly or Nurse.

The total attendances decreased by 1,946 to 6,327. Analysis of this shows :—

	Attendances.	Decrease.
Medical Officer's Clinics	.. 3225	.. 266
Intermediate Attendance :—		
Male .. .. .	.. 2469	.. 1519
Female .. .. .	.. 633	.. 116

The decrease, as pointed out above, was largely due to the decrease in the incidence of Gonorrhœa from 151 to 135 new cases.

In the Annual Report for 1936 reasons were given why an extension of the present V.D. Clinic to include wards for in-patients was unsuitable, and it is unnecessary to repeat this. During the year plans were agreed upon for a new building which would provide accommodation for both out-patients and in-patients, and have been submitted to the Ministry of Health. Colonel Harrison came to Carlisle to discuss this with representatives of the Local Authorities and of the Infirmary Committee. Subsequently the V.D. Medical Officer and the Architect had a further interview with him at the Ministry, and all differences of opinion were overcome by compromise.

In the proposed new premises there will be access to the Clinic for both sexes through the Out-Patient Department. In addition there will be separate access for male patients from the hospital grounds, so that they will have an alternative route. An effort was made to obtain a similar concession for female patients, but agreement on this point was impossible, and the site finally chosen for the building does not permit of this.

The outcome of all this is that the proposed new Clinic, though not ideal in every respect, will be a very great improvement on the present one, and this should be reflected in increased attendance, and an eventual decline in the incidence of Venereal Disease in Carlisle and Cumberland.



The class of case now sent away to Newcastle or elsewhere for treatment will be dealt with locally. Many cases now necessarily treated as out-patients will have the benefit of in-patient treatment, and, in consequence, a more certain and more speedy cure should be effected.

The new building will consist of two separate ground floor blocks connected by a corridor to each other, and to the main hospital buildings. The larger block is the out-patient clinic, and the smaller one the wards, which will provide beds for two male and three female patients. The reason for this is that females require in-patient treatment much more often than males. As a rule the treatment of these ward cases will be carried out in the out-patient department, and they will return to bed immediately.

It is hoped that during 1938 the proposals outlined above will have become more definite, and that in the near future the new department will materialise.

#### **IN-PATIENTS UNDER TREATMENT IN 1937 AT OTHER HOSPITALS.**

		Newcastle		Leeds		Total
Admissions in 1937	..	5	..	2	..	7
Total Number Treated	..	5	..	3	..	8
Total In-patient Days	..	217	..	448	..	665

#### **MALARIAL TREATMENT OF GENERAL PARALYSIS OF THE INSANE (G.P.I.).**

The Medical Officer had the privilege of attending in July the Annual Meeting of the Medical Society of the Study of Venereal Disease (M.S.S.V.D.) at the Horton L.C.C., Hospital.

Here a clinical demonstration of cases of G.P.I. was given by the Medical Officers of the Hospital. Most of these were examples of failure of the Malaria treatment carried out in other hospitals all over the country.

There was also a pathological demonstration showing stages of development of Malaria in man and mosquito and preparations of brain from fatal cases of G.P.I.

The insectarium, where the anopheles mosquitoes were being bred, was also open to inspection. This was a kind of hot-house containing miniature swamps and a young pig on which the newly-hatched mosquitoes settled for their first feed. The pigs thrive well, and are replaced when they grow too big.



During the year one case of G.P.I. was treated with Malaria with the co-operation of Dr. G. W. Watson, Distington, the Malaria-infected blood being obtained from the Ministry of Health (supplied from material available at Horton). The result in this case was satisfactory, the disease being apparently arrested.

### **THE TREATMENT CENTRE AT THE WHITEHAVEN AND WEST CUMBERLAND HOSPITAL.**

It is unnecessary to repeat in detail the defects of this centre. Nothing has been done to remedy these, and the Clinic was carried on as in previous years in spite of the difficulties and limitations imposed upon staff.

The prospects for the future are brighter. A decision has been made to build a new hospital at Whitehaven, and this will include a new V.D. Clinic. Nothing further has been done, but it is hoped that shortly it will be possible to have plans, and a definite scheme prepared.

The Centre was open on one day a week, with a session for women and children in the afternoon, and one for men in the evening.

### **STATISTICS OF THE WHITEHAVEN CENTRE.**

The attendance, as at Carlisle, decreased by 179, compared with the previous year; the total attendance being 1,049.

Excluding re-admissions for the same infection, there were 124 new cases of whom 16 were suffering from Syphilis, 41 from Gonorrhœa, 1 from Soft Chancre, and 66 from ailments other than Venereal Disease.

Of the Syphilis cases none were in the early and infectious stage. There were 3 cases of Syphilis and 22 of Gonorrhœa discharged apparently cured. Only 2 new cases of congenital Syphilis were seen. This was the same as in 1936, and compares with 11 in 1935.

The attendance is far from satisfactory, and the proportion of defaulters is much greater than at the Carlisle centre. This failure to complete treatment or undergo the necessary period of observation and tests for cure is largely attributable to the absence of daily treatment. It is not possible to conduct a satisfactory treatment centre without this facility.

	Syphilis.		Soft Chancre.		Gonorrhoea		M. F.		M. F.		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation .. .. .	58	59	0	0	45	13	0	1	103	73	176	
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection .. .. .	6	4	0	0	10	7	—	—	16	11	27	
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—												
Syphilis, primary .. .. .	7	1	—	—	—	—	—	—	7	1	8	
" secondary .. .. .	2	7	—	—	—	—	—	—	2	7	9	
" latent in 1st year of infection .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" all later stages .. .. .	14	14	—	—	—	—	—	—	14	14	28	
" congenital .. .. .	9	4	—	—	—	—	—	—	9	4	13	
Soft Chancre .. .. .	—	—	1	1	—	—	—	—	1	1	2	
Gonorrhoea, 1st year of infection .. .. .	—	—	—	—	128	31	—	—	128	31	159	
" later .. .. .	—	—	—	—	5	7	—	—	5	7	12	
Condition other than venereal .. .. .	—	—	—	—	—	—	80	72	80	72	152	
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection or to have been under observation at other Centres .. .. .	5	2	0	0	20	3	0	0	25	5	30	
TOTALS OF ITEMS 1, 2, 3 AND 4 .. .. .	101	91	1	1	208	61	80	73	390	226	616	
5. Number of cases discharged after completion of treatment and final tests of cure, or after diagnosis as non-venereal .. .. .	7	7	1	0	84	29	76	71	163	107	275	
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—												
Syphilis, primary .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" secondary .. .. .	0	2	—	—	—	—	—	—	0	2	2	
" latent in 1st year of infection .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" all later stages .. .. .	4	10	—	—	—	—	—	—	4	10	14	
" congenital .. .. .	1	6	—	—	—	—	—	—	1	6	7	
Soft Chancre .. .. .	—	—	0	0	—	—	—	—	0	0	0	
Gonorrhoea, 1st year of infection .. .. .	—	—	—	—	31	4	—	—	31	4	35	
" later .. .. .	—	—	—	—	1	0	—	—	1	0	1	
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure. .. .. .	14	2	0	0	26	4	—	—	40	6	46	
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners .. .. .	14	5	0	1	22	11	2	1	38	18	56	
9. Number of cases remaining under treatment or observation on 31st December .. .. .	61	59	0	0	44	13	2	1	107	73	180	
TOTALS OF ITEMS 5, 6, 7, 8 AND 9 .. .. .	101	91	1	1	208	61	80	73	390	226	616	
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment :—												
Syphilis, primary .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" secondary .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" latent in 1st year of infection .. .. .	0	0	—	—	—	—	—	—	0	0	0	
" all later stages .. .. .	1	2	—	—	—	—	—	—	1	2	3	
" congenital .. .. .	0	2	—	—	—	—	—	—	0	2	2	
11. Number of attendances :—												
(a) for individual attention of the medical officer(s) .. .. .	1135	1235	4	2	1205	405	138	106	2482	1748	4230	
(b) for intermediate treatment, e.g., irrigation, dressing .. .. .	40	0	1	0	2397	677	31	0	2469	677	3146	
TOTAL ATTENDANCES .. .. .	1175	1235	5	2	3602	1082	169	106	4951	2425	7376	
12. In-patients :—												
(a) Total number of persons admitted for treatment during the year .. .. .	—	—	—	—	—	—	—	—	—	—	—	
(b) Aggregate number of "in-patient days" of treatment given .. .. .	—	—	—	—	—	—	—	—	—	—	—	
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods .. .. .	Under 1 year	1 & under 5 years	5 & under 15 years	15 years and over	Totals							
	M. F.	M. F.	M. F.	M. F.	M. F.							
	1	0	2	0	5	3	1	1	9	4		



APPENDIX "B."

---

**ANNUAL REPORT**  
OF THE  
**VACCINATION OFFICER**

W. BUTCHER.

For the Year 1937.

---

## VACCINATION.

During the year 1937 three changes took place in the personnel of Public Vaccinators. Dr. J. Lascelles Gilmore was appointed in place of Dr. P. M. Logan (resigned), Dr. D. R. Gray in the place of Dr. Story Brown (deceased), and Dr. John MacKenzie in the place of Dr. G. R. Burnett (resigned).

The number of Registration Districts has been reduced to 17 from 20, and it is anticipated that a further review of districts may take place in the not too distant future.

Generally speaking, the required certificates of successful vaccination and postponement are promptly received from the Public Vaccinators concerned, and regulations are promptly and accurately carried out. It has not been found necessary to institute proceedings against any person for failure to comply with the Vaccination Acts, although in five cases warning notices have had to be sent.

The figures in the attached table show that there is still a high percentage of cases in which Statutory Declaration of Exemption is obtained, and it will be seen that in the industrial parts of the County very few vaccinations are undertaken.

The decline in vaccination is not confined to Cumberland alone. The national figures published by the Ministry of Health clearly indicate this fact. In 1932, in England and Wales, there were 207,543 vaccinations undertaken by Public Vaccinators, and in 1936 the figure had fallen to 176,618. There are two factors which I think affect the position. In the first place there is the absence of any serious outbreak of Smallpox in this country during the last few years, and, in the second place the Vaccination Acts are antiquated and cumbersome, and an amendment of the law, I feel sure, would tend to prevent to some extent this rapid decline in the number of successful vaccinations. Many parents, immediately on receiving the vaccination form from the Registrar adopt the easier course of completing a Statutory Declaration of Exemption, and, although as the law stands, there is some degree of compulsion, yet at the same time parents have a perfectly free choice as to whether or not their children are vaccinated, if they choose to apply for exemption within the limit of time laid down by the law.

# RETURN RESPECTING THE VACCINATION OF CHILDREN WHOSE BIRTHS WERE REGISTERED DURING THE YEAR 1936.

Vaccination District.	No. of Births Registered.	Certificates of Vaccination received.		Statutory Declarations received.		Otherwise accounted for.		Cases unaccounted for.	
		No.	Per cent. of Reg. Births.	No.	Per cent. of Reg. Births.	No.	Per cent. of Reg. Births.	No.	Per cent. of Reg. Births.
Abbey Holme ..	110 ..	48	43.6	56	50.9	6	5.5	—	—
Alston ..	26 ..	12	46.1	13	50.1	1	3.8	—	—
Boole ..	133 ..	59	44.3	69	51.9	5	3.8	—	—
Brampton ..	96 ..	73	76.0	16	16.7	7	7.3	—	—
Burgh ..	11 ..	5	45.5	5	45.4	1	9.1	—	—
Cockermouth ..	128 ..	31	24.2	90	70.3	7	5.5	—	—
Dalston ..	42 ..	29	69.0	9	21.4	4	9.6	—	—
Egremont ..	218 ..	83	38.1	124	56.9	11	5.0	—	—
Harrington ..	216 ..	67	31.0	140	64.8	9	4.2	—	—
Hayton ..	26 ..	22	84.6	4	15.4	—	—	—	—
Keswick ..	84 ..	30	35.7	49	58.4	5	5.9	—	—
Kirkoswald ..	71 ..	49	69.0	20	28.2	2	2.8	—	—
Longtown ..	98 ..	86	87.7	8	8.2	4	4.1	—	—
Maryport ..	308 ..	59	19.1	241	78.2	8	2.7	—	—
Penrith ..	234 ..	120	51.2	99	42.3	12	5.2	3	1.3
Stanwix ..	33 ..	20	60.6	8	24.2	5	15.2	—	—
Wetheral ..	40 ..	32	80.0	5	12.5	1	2.5	2	5.0
Whitehaven ..	533 ..	154	28.9	353	66.3	26	4.8	—	—
Wigton ..	191 ..	66	34.6	109	57.0	13	6.8	3	1.6
Workington ..	494 ..	62	12.5	403	81.6	28	5.7	1	0.2
TOTALS—1936	3092 ..	1107	35.8	1821	58.9	155	5.0	9	0.3
TOTALS—1935	3246 ..	1113	34.3	1957	60.3	171	5.2	5	0.2

Cases "Otherwise accounted for" includes cases died unvaccinated, postponed by medical certificate, insusceptible of vaccination, removed from the district, and lost sight of.





APPENDIX "C."

---

**\*ANNUAL REPORT**

OF THE

**ACTING COUNTY VETERINARY OFFICER**

JOHN CAMERON, B.Sc., M.R.C.V.S., D.V.S.M.

For the Year 1937.

---

\* Excluding Diseases of Animals other than Tuberculosis.

*To the Chairman and Members of the Milk and Dairies  
Committee and the Agricultural Committee.*

LADIES AND GENTLEMEN,

I have the honour to submit for your consideration the Annual Report on the work carried out by the Veterinary Department during the year ended 31st December, 1937.

The work performed by the Department during 1937 was similar to that outlined by Mr. Simpson in the Annual Report for 1936.

The outstanding event as far as the Veterinary Department is concerned, was the passing of the Agriculture Act, 1937, Part IV. of which transfers the Veterinary Duties under the Milk and Dairies and Diseases of Animals Acts and Orders from County and Borough Councils to the Ministry of Agriculture and Fisheries, on a day to be appointed by Order of the Minister.

It was suggested that the appointed day would be 1st January, 1938, but arrangements were not sufficiently advanced, and a later date had to be selected.

In order to ensure that the transfer would take place as smoothly as possible, the Ministry asked that certain Veterinary Officers of Local Authorities who were to be "key" men in the new scheme, should be made available for duty with the Ministry.

Mr. Simpson was one of the men selected, and he was released by the County Council, and took up his new duties on the 20th December, 1937.

I was appointed to act as County Veterinary Officer from the time of Mr. Simpson's departure until the day appointed for the transfer of the Veterinary Duties to the Ministry of Agriculture and Fisheries.

The Report for 1937 is the last Annual Report that will be issued. It is confined largely to figures and tables, giving details for comparison with reports of previous years.

Thanks are due to the Chief Constable and the County Constabulary for their continued co-operation and assistance in administering the Diseases of Animals Acts and Orders.

I have the honour to be,

Your obedient Servant,

JOHN CAMERON,  
*Acting County Veterinary Officer.*

WHITEHALL CHAMBERS,  
LOWTHER STREET,  
CARLISLE.

## SECTION I.

### MILK AND DAIRIES ORDER, 1926.

Routine clinical inspection of dairy cattle was carried out as in previous years under the authority provided by this Order. As far as possible, joint inspections were carried out along with Sanitary Inspectors. Owing to pressure of other sanitary duties, however, the number of joint inspections was less than in 1936. There has been little change in the number of premises registered under this Order, but there has been a definite drop in the number of dairy cattle, as compared with 1936. Comparative figures are :—

		No. of Visits.		No. of Cows Examined.		Average No. of Cows per herd examined.
1937	..	2,969	..	47,225	..	15.8
1936	..	2,887	..	48,539	..	20.3

This change was probably more pronounced on the farms of wholesale producers, who replenish their herds by cows bought in the open market. There has been a shortage of dairy cows, and a marked increase in the price as compared with recent years. Retailers and others who have to maintain a level delivery, were compelled to keep the number of cows up, but wholesalers preferred to supply less milk than to buy cows at the prices ruling. A decrease in the number of aged and defective cows found on inspection was also noticeable. This is largely accounted for by the improvement in the trade for fat cows.

The following Statement shows the number of herd inspections, and the number of cows examined during the year.

TABLE I.

Class of Herd	No. of Visits	No. of Cows Exam'd	Pathological Conditions Detected.				
			Tuberculosis			Mastitis Induration Suppuration	Atrophy & other Conditions
			Udder	Emac.	C. Co'gh		
Non. Graded	1809	22325	13	7	43	139	217
Accredi- ted	1160	24900	16	5	34	116	10
Totals	2969	47225	29	12	77	255	227

The above figures include three pulmonary cases of Tuberculosis detected in the Borough of Whitehaven, and one pulmonary case in the Borough of Workington.

In addition, 89 visits were paid to Tuberculin Tested herds, when 5,239 cattle were examined.

TABLE II.

The following Table shows the number of herd inspections and cows examined over a period of three years :—

	1937.		1936.		1935.
Herds Inspected. .	2,969	..	2,887	..	2,727
Cows Examined	47,225	..	48,539	..	44,739

645 of the herds inspected in 1937 were supplying butter only, and 20 were purely breeding farms.

### MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

During the year three complaints as to tuberculous infection in milk produced in the County Area have been received from outside sources.

Two were reported from Newcastle-on-Tyne, and one from Whitley Bay. In the first case from Newcastle, a cow had been slaughtered under the Tuberculosis Order between the time the sample was taken and the time the report was received. In the second case, two cows with tuberculous udders were found and dealt with under the Tuberculosis Order. In the third case, reported from Whitley Bay, one cow affected with tuberculosis of the udder was slaughtered under the Tuberculosis Order. Control samples of the milk of the cows remaining in these three herds were submitted for biological examination, and all were reported on as negative for tubercle bacilli.

In addition to these cases, the milk sampling in the County area led to the detection of a further 21 cases of tuberculous infected milk. In two of these cases a common supply was involved, giving a net total of 20 cases. This is an increase of 12 as compared with 1936.



The increase in the number of infected samples can largely be accounted for by the system adopted whereby the milk from two or three herds was grouped into one guinea pig. As a result of this, many more herds were sampled, and the number of cows in these samples was greater than in previous years. 45 farms were involved in the 20 positive reports.

Investigation produced the following results. The cow responsible was detected in ten cases. In four cases the animal believed to be responsible either died or was sold for slaughter before examination. One case was not completed by the end of the year, and in the remaining five cases, no source of infection was found. Control sampling of the milk cows remaining in the herds failed to show evidence of tuberculous infection. The positive reports included two school supplies. The animals responsible were detected immediately, and the control samples showed that the supply was then free from infection.

### **MILK SAMPLING.**

The arrangements for milk sampling detailed in the Annual Report for 1936 were continued in 1937. The majority of the Sanitary Authorities took the samples in accordance with the recommendations contained in the special memorandum issued by the Ministry of Health, but a number of them are still without the type of sampling outfits suggested in that Memo.

During the year a total of 2,183 samples were taken under the Joint Scheme of Milk Sampling. This number includes those taken from the milk produced at farms licensed under the Milk (Special Designations) Order, 1936, and also samples taken from school supplies which came both from graded and ungraded farms. The results of the sampling in the two latter classes are shown later in this Report.

735 samples from ungraded supplies were dealt with during the year.

The following Table shows the number of samples which reached the Accredited standard, and the number which fell below that standard. These results cannot be compared with the results for previous years, as this is the first year in which the Methylene Blue Test was used instead of the Plate Count Test :—

			Accredited Standard.		Below Accredited Standard.	Total.
RURAL AREAS.						
Alston	..	..	1	..	13	.. 14
Border	..	..	30	..	22	.. 52
Cockermouth	..	..	62	..	104	.. 166
Ennerdale	..	..	62	..	101	.. 163
Millom	..	..	28	..	38	.. 66
Penrith	..	..	12	..	26	.. 38
Wigton	..	..	22	..	80	.. 102
URBAN AREAS.						
Cockermouth	..	..	4	..	3	.. 7
Keswick	..	..	3	..	5	.. 8
Maryport	..	..	8	..	14	.. 22
Penrith	..	..	1	..	8	.. 9
BOROUGHES.						
Workington	..	..	37	..	28	.. 65
Whitehaven	..	..	4	..	19	.. 23
				<hr/>		
				274 (37%)..	461 (63%)..	735
				<hr/>		

Of the 2,183 samples collected during the year under the Joint Scheme, 1,315 were also submitted to a biological examination. Of these, 20 (1.5%) were found to contain tubercle.

The following table shows the percentage of positive samples for the previous four years :—

TABLE III.

Year.			Number of Samples submitted to the Biological Test.		Percentage positive for Tubercle.
1937	..	..	1,315	..	1.5%
1936	..	..	728	..	1%
1935	..	..	569	..	2.3%
1934	..	..	515	..	2.1%

### **MILK (SPECIAL DESIGNATIONS) ORDER, 1936.**

The Milk (Special Designations) Order, 1936, was reviewed in the Annual Report of 1936, and the only alteration to be noted is that, as foreshadowed in that report, milk from Tuberculin Tested herds must now be sold through the Milk Marketing Board, and is therefore liable to levies. Producers of Tuberculin Tested milk receive a bonus of 1d. per gallon in addition to the 1d. bonus for Accredited milk. If they are also licensed under the Ministry of Agriculture and Fisheries Attested Herds' Scheme, they get a further bonus of 1d., making a total bonus of 3d. per gallon on milk sold through the Milk Marketing Board.

The Veterinary Department continued to be responsible for the issue of licences, and there has been an increase in the number of producers holding Tuberculin Tested and Accredited licences.

At the end of 1937 there were 51 premises licensed to produce Tuberculin Tested milk, and 303 licensed to produce Accredited milk, as compared with 42 and 269 respectively at the end of 1936.

### **MILK SUPPLIES TO SCHOOLS AND PUBLIC INSTITUTIONS.**

The arrangements made in the County for the supply of milk to schools and public institutions was continued as in 1936. Considerable difficulty was experienced in getting supplies for small country schools, as the payment received for small quantities does not compensate for the trouble and expense involved. During the year, 266 samples were examined for cleanliness. Of these, 180 reached Accredited standard, and 86 fell below that standard.

### **ATTESTED HERDS.**

In the Annual Reports for 1935 and 1936, reference was made to the Attested Herd Scheme of the Ministry of Agriculture and Fisheries. It was pointed out in these reports that the Scheme did not prove attractive to many farmers. The reasons given were :—

- (1) That the testing necessary to eradicate tuberculosis in the herd, and to produce certificates showing two clear herd tests had all to be paid for by the owner of the herd.

- (2) That the bonus of 1d. per gallon paid to holders of Attested licences was only payable on milk sold through the Milk Marketing Board, and that producers of Tuberculin Tested milk who could find a market other than through the Milk Marketing Board were exempt from the Board's levies. This more than compensated them for the loss of the Attested Bonus.

In 1937, the Attested Herd Scheme was amended and provided for financial assistance towards the cost of qualifying tests, not exceeding four, in the case of any herd which has been tested with tuberculin, and has revealed not more than a specific proportion (about 10%) of reactors. The owner must comply with certain conditions, including the disposal of reactors immediately after each test, and disinfection of premises. The contribution which the Ministry offers towards the cost of these assisted tests is at the rate of 2s. 6d. per animal tested, plus a flat rate of £1 1s. per herd. The contribution in the case of a herd of 40 cattle will thus amount to £6 1s. in respect of each herd test.

Before a herd will be accepted for these "Assisted" tests, the Ministry will satisfy itself that the management of the herd and the conditions under which it is kept are suitable for the proper observance of the rules applicable to Attested Herds. The Milk Marketing Scheme also was amended in 1937, and all Tuberculin Tested milk must now be sold through the Board.

The two main objections to the Scheme have therefore been overcome, and it is to be hoped that there will soon be a very substantial increase in the number of Attested Herds in the County. At the end of 1937, there were twelve Attested Herds in the County of Cumberland. This is a ridiculously small number for a breeding county such as Cumberland.

### **MICROSCOPIC EXAMINATION OF SAMPLES.**

All samples of milk from individual cows which are suspected to be suffering from tuberculosis of the udder are examined by the Veterinary Officer. Samples of sputum, blood, and skin scraping, etc., are also dealt with at Carlisle, Cockermouth and Whitehaven, where the Department has laboratory facilities available. The microscopic examination of milk and sputum is a valuable aid in the clinical diagnosis of tuberculosis, and enables the Staff to take immediate action in dealing with positive cases under the Tuberculosis Order.

The biological test, however, is necessary for bulk and group samples of milk, and the inoculation tests are carried out at the Cumberland Pathological Laboratory.

The following Statement shows the number of Milks, Sputa, &c., examined microscopically by the Veterinary Staff :—

TABLE IV.

Disease Suspected.	Material Examined.	Result of Examination.		
		Positive.	Negative	Total
Anthrax	Blood	10	88	98
Sheep Scab	Scrapings	27	1	28
Tuberculosis	Milk	47	322	369
Do.	Sputum	142	420	562

1057

## SECTION II.—DISEASES OF ANIMALS.

### TUBERCULOSIS ORDER, 1925.

The following tables show the number of Cattle dealt with during the year, as compared with the previous two years :—

TABLE V.

	1937.		1936.		1935.
Premises on which " disease "					
was reported or suspected ..	268	..	304	..	266
Premises on which " disease "					
was found to exist ..	213	..	230	..	212
Premises on which " disease "					
was found not to exist ..	55	..	74	..	54
Total number of cattle on					
premises visited .. ..	12094	..	13412	..	12931
Number of cattle clinically					
examined .. .. .	5042	..	5637	..	5714
Number of Cattle slaughtered					
by Local Authority :—					
Cows in Milk .. ..	173	..	177	..	177
Other Cows or Heifers ..	46	..	57	..	43
Other Bovines .. ..	4	..	3	..	4
	<hr/>		<hr/>		<hr/>
	223	..	237	..	224
	<hr/>		<hr/>		<hr/>

Types of Tuberculosis found amongst the Cattle slaughtered :—

	1937.		1936.		1935.
Tuberculosis of the Udder ..	45	..	41	..	34
Giving tuberculous milk, but not					
showing evidence of tubercu-					
losis during life .. ..	—	..	—	..	—
Tuberculous Emaciation ..	40	..	52	..	83
Tuberculosis with Chronic Cough					
and showing definite Clinical					
Signs .. .. .	138	..	143	..	106
Not affected with Tuberculosis ..	—	..	1	..	1
	<hr/>		<hr/>		<hr/>
	223	..	237	..	224
	<hr/>		<hr/>		<hr/>



In Appendix III., details are given in regard to the compensation paid or payable. Compensation amounting to £1,069 12s. 3d. was payable, as compared to £926 16s. 9d. for the previous year. In no case was compensation withheld. Only 25% of the sum of £1,069 12s. 3d. is payable by the Local Authority, and against this payment can be put the sum of £157 2s. 2d. obtained from the salvage of carcases and hides:—

TABLE VI.

	1937.	1936.	1935.
No. of Animals Slaughtered ..	223 ..	237 ..	224
No. of " Advanced " Cases ..	96 (43%)	107 (45.2%)	112 (50%)
No. of " Not-Advanced " Cases	127 .. (57%)	129 .. (54.4%)	111 (49.6%)
No. Not Affected .. ..	Nil. ..	1 .. (.4%)	1 (.4%)

The average amount of compensation payable to the owners was £4 15s. 11d., the average valuation being £8 9s. 10d. All valuations were carried out without the service of valuers being required. No objection was raised to the slaughter of any of the animals dealt with under the Order. The rate of compensation and valuation are again on a higher level, this being accounted for by the higher market values, and also by the detection of a considerable proportion of the animals in an early stage of the disease. The results for 1937 show that the decline in the percentage of " Advanced " cases as compared with " Not-Advanced " cases has been maintained.

Of the animals slaughtered, 166 were sent to knackers. The remaining 57 were sent to abattoirs; of these 32 were totally condemned, and 25 passed as fit for food, after condemnation of the affected organs or parts of the carcase. In every case a post-mortem examination is carried out by the Veterinary Staff in accordance with the Order, and every facility is given to owners to be present or to be represented at these examinations. In the case of animals sent to abattoirs, the carcases are submitted to inspection by the responsible officer of the Sanitary Authority, on whom the duty is placed of deciding as to whether the carcases or parts of the carcases are fit for sale for human consumption.

APPENDIX I.

Statement showing the Number of Tuberculin Tested Licences issued in each District, with the Results of Milk Sampling and Clinical Examination of the Herds.

Sanitary District	SAMPLES TAKEN.				Cases of Tuberculosis Detected on Veterinary Examination.			OTHER CONDITIONS		
	Licences Issued	Number taken	T.T. Standard	Below Standard	Tuberculous	T.B. Udder	T.B. Emaciation	Chronic Cough, etc.	Mastitis Induration, Non-T.B., etc.	Atrophy
Alston R.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Border R.D.C. ..	32	83	64	19	Nil.	1	Nil.	Nil.	6	Nil.
Cockermouth R.D.C. ..	7	12	10	2	Nil.	Nil.	Nil.	Nil.	9	Nil.
Ennerdale R.D.C. ..	2	23	18	5	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Millom R.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Penrith R.D.C. ..	9	16	13	3	Nil.	Nil.	Nil.	Nil.	6	Nil.
Wigton R.D.C. ..	4	15	7	8	Nil.	1	Nil.	Nil.	Nil.	Nil.
Cockermouth U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Keswick U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Maryport U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Penrith U.D.C. ..	Nil.	2	2	Nil.	(These were taken from a retailer of T.T. milk in Penrith).					
Whitehaven Borough ..	1	9	9	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Workington Borough ..	1	25	15	10	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Totals ..	56	185	138	47	Nil.	2	Nil.	Nil.	21	Nil.

NOTE.—Of the above Licences issued during 1937, later in the year four were cancelled in the Border R.D.C., and one in the Cockermouth R.D.C.



APPENDIX I.

Statement showing the Number of Tuberculin Tested Licences issued in each District, with the Results of Milk Sampling and Clinical Examination of the Herds.

Sanitary District	Licences Issued	SAMPLES TAKEN.				Cases of Tuberculosis Detected on Veterinary Examination.			OTHER CONDITIONS		
		Number taken	T.T. Standard	Below Standard	Tuberculous	T.B. Udder	T.B. Emaciation	Chronic Cough, etc.	Mastitis	Induration, Non-T.B., etc.	Atrophy
Alston R.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Border R.D.C. ..	32	83	64	19	Nil.	1	Nil.	Nil.	Nil.	6	Nil.
Cockermouth R.D.C. ..	7	12	10	2	Nil.	Nil.	Nil.	Nil.	Nil.	9	Nil.
Ennerdale R.D.C. ..	2	23	18	5	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Millom R.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Penrith R.D.C. ..	9	16	13	3	Nil.	Nil.	Nil.	Nil.	Nil.	6	Nil.
Wigton R.D.C. ..	4	15	7	8	Nil.	1	Nil.	Nil.	Nil.	Nil.	Nil.
Cockermouth U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Keswick U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Maryport U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Penrith U.D.C. ..	Nil.	2	2	Nil.	(These were taken from a retailer of T.T. milk in Penrith).	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Whitehaven Borough ..	1	9	9	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Workington Borough ..	1	25	15	10	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
Totals ..	56	185	138	47	Nil.	2	Nil.	Nil.	Nil.	21	Nil.

NOTE.—Of the above Licences issued during 1937, later in the year four were cancelled in the Border R.D.C., and one in the Cockermouth R.D.C.



APPENDIX II.

Statement showing the Number of Accredited Licences issued in each Sanitary District, with the Results of Milk Sampling and Clinical Examinations of the Herds.

Sanitary District	Licences Issued	SAMPLES TAKEN.						Cases of Tuberculosis Detected on Veterinary Examination or Reported.			OTHER CONDITIONS		
		Number taken	Accredited Standard	Below Standard	Tuberculosis	T.B. Udder	T.B. Emaciation	Chronic Cough, etc.	Mastitis, Induration.	Atrophy Non-T.B., etc.			
Alston R.D.C. ..	2	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	3			
Border R.D.C. ..	124	403	271	132	4	11	3	27		9			
Cockermouth R.D.C. ..	27	73	51	22	1	Nil.	1	Nil.		9			
Ennerdale R.D.C. ..	25	62	52	10	1	2	2	5		21			
Millom R.D.C. ..	18	55	39	16	1	1	2	7		26			
Penrith R.D.C. ..	19	47	29	18	Nil.	Nil.	Nil.	1		6			
Wigton R.D.C. ..	69	222	129	93	5	3	Nil.	4		20			
Cockermouth U.D.C. ..	2	9	8	1	Nil.	Nil.	Nil.	Nil.		Nil.			
Keswick U.D.C. ..	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.		Nil.			
Maryport U.D.C. ..	5	20	15	5	Nil.	Nil.	Nil.	Nil.		3			
Penrith U.D.C. ..	1	1	1	Nil.	Nil.	Nil.	Nil.	Nil.		1			
Whitehaven Borough	9	54	38	15	Nil.	Nil.	Nil.	3		22			
Workington Borough ..	4	52	29	23	Nil.	Nil.	Nil.	1		6			
TOTALS ..	305	997	662	335	12	17	8	48		126			

NOTE.—(a) A further 12 Accredited Producers not included in the above list, transferred to the production of Tuberculin Tested milk during the year, and are included in Appendix I.

NOTE.—(b) Of the 305 shown above, two licences were cancelled during the year.





APPENDIX "D."

---

**ANNUAL REPORT**

OF THE

**COUNTY ANALYST**

C. J. H. STOCK, B.Sc., F.I.C.

For the Year 1937.

---

# FOOD AND DRUGS (ADULTERATION) ACT, 1928.

## ANNUAL REPORT OF THE COUNTY ANALYST.

1. During the 12 months ending the 31st December, 1937, I have analysed 343 samples of Food and Drugs, submitted by the Inspectors appointed under the Food and Drugs (Adulteration) Act, 1928, for the County of Cumberland, viz. :—

From the Whitehaven Division	..	..	112
From the Carlisle Division	..	..	35
From the Workington Division	..	..	133
From the Wigton Division	..	..	34
From the Penrith Division	..	..	29
			343

The number of samples submitted shows a decrease of 15, as compared with the number received during the year ended the 31st December, 1936, but this is largely accounted for by the fact that in the latter year there were 24 reference and appeal samples taken, while, in 1937, there were only 13 reference and appeal samples.

2. The result of the analysis of samples submitted during the year, together with the action taken in the case of those samples which either did not comply with recognised standards or with the descriptions attached to them, is shown hereunder :

No. of samples of Milk submitted for analysis	258
No. of other samples submitted for analysis	85
	343
No. of samples adulterated or below standard	23
"      "      below standard, but of genuine quality	17
"      "      of doubtful quality	0
"      "      of abnormal quality	0
"      reference samples	4

No. of appeal samples	..	..	..	9
„ persons cautioned	..	..	..	4
„ persons summoned	..	..	..	4
„ persons convicted	..	..	..	1
„ persons discharged under Probation of Offenders Act, but ordered to pay Costs	..	..	..	2
„ cases withdrawn	..	..	..	1
„ cases in which no action was taken	..			3
„ cases pending	..	..	..	0
„ persons noted for further sampling	..			13
Amount of Fines	..	..	..	£1 16 0
„ Costs	..	..	..	£4 12 0

Of the three cases in which proceedings were instituted, two were in connection with Milk and one with Sausage.

Both the Milk cases were concerned with deficiencies in Fat, and in one of them there were two defendants; the Bench found the charge proved against both defendants, but one of them was discharged under the Probation of Offenders Act on Payment of the Court costs, and the other was convicted and a fine was inflicted with costs.

In the other case the defendant was dealt with under the Probation of Offenders Act on payment of costs.

In the third case the summons was in connection with a sample of Sausage containing a preservative, Sulphur Dioxide, in contravention of the Public Health (Preservatives, etc., in Food) Regulations, but as the defendant died before the hearing of the case, the summons was withdrawn.

It is of interest to note that the number of samples adulterated or below standard reported during the 12 months ending the 31st December, 1936, was 34; while during 1937 the number was only 23, and that the number of persons summoned in 1936 was 11, but only 4 in 1937, and, as already stated, in one of the cases in 1937, two defendants were concerned.

The number of persons cautioned in 1936 was 2, and in 1937 the number was 4, while the number of persons noted for further sampling was 17, and in 1937 it was 13, so that there is a general improvement all round so far as the administration of the Food and Drugs (Adulteration) Act, 1928, is concerned for the year just ended.

3. The percentage of samples adulterated or below standard for the year is 6.96, compared with 10.24 for the 12 months ended the 31st December, 1936. In these figures neither appeal samples nor reference samples are included, but in each case all samples which have been reported as being of genuine quality, although below standard, are included in the total number for the purpose of calculation.

4. The number of Milk samples submitted during 1937 was 258, which was 10 less than the number of Milk samples submitted during 1936.

Of the Milk samples submitted, 207 complied with the requirements of the Sale of Milk Regulations, 1901, and the average figures for Non-fatty Solids and for Fat in these samples were :—

Non-fatty Solids	..	..	..	8.82%
Fat	..	..	..	3.70%

The average figures for 199 samples of Milk, taken in the ordinary course of inspection during 1936, and which were found to comply with the requirements of the Sale of Milk Regulations, 1901, were :—

Non-fatty Solids	..	..	..	8.80%
Fat	..	..	..	3.63%

These figures are in close agreement for the annual averages for genuine samples recorded during the last few years.

Samples of Milk which were returned as being of genuine quality, although below standard, numbered 17, of which 2 samples were deficient both in Non-fatty Solids and in Fat, 14 samples were deficient in Non-fatty Solids only, and 1 sample was deficient in Fat.

With one exception the whole of the samples which disclosed a deficiency in Non-fatty Solids gave freezing points (Hortvet) figures which showed that the deficiencies were due to some cause not in any way connected with the addition of water ; the exception was a sample with a high proportion of Fat, and one which was too acid at the time of receipt to enable an accurate determination of the freezing point (Hortvet) figure to be made.

In the 3 cases of fat deficiency the corresponding appeal samples showed that in each one of them this was due to some natural cause.

Samples reported as being adulterated or below standard totalled 21, and of these 1 sample was deficient in both Non-fatty Solids and in Fat, 3 were deficient in Non-fatty Solids only, and 17 were deficient in Fat.

The sample which disclosed the dual deficiency gave a freezing point (Hortvet) figure which was normal for unwatered Milk, the figure being  $-0.545^{\circ}\text{C.}$ , and 2 of the samples which were deficient in Non-fatty Solids gave freezing point (Hortvet) figures of  $-0.526^{\circ}\text{C.}$  and  $-0.516^{\circ}\text{C.}$ , both affording unmistakable evidence of the presence of extraneous water; while 1 sample was sour on receipt, and it was not possible to determine the freezing point (Hortvet).

With reference to these samples, further investigation resulted in 4 reference samples being submitted and 9 appeal samples.

Of the reference samples, 1 was below standard in Non-fatty Solids and in Fat, 1 was below standard in Non-fatty Solids only, and 2 were genuine. The samples showing a deficiency in Non-fatty Solids gave freezing point (Hortvet) figures of  $-0.548^{\circ}\text{C.}$  and  $-0.542^{\circ}\text{C.}$ , both perfectly normal.

The appeal samples comprised 5 which were genuine, 1 which was deficient both in Non-fatty Solids and in Fat, the freezing point (Hortvet) in this case being  $-0.548^{\circ}\text{C.}$ , 2 which were deficient in Non-fatty Solids only with freezing point (Hortvet) figures of  $-0.540^{\circ}\text{C.}$  and  $-0.543^{\circ}\text{C.}$ , again normal figures, and 1 sample which was deficient in Fat.

The percentage of adulteration for Milk, which included all samples reported as being adulterated or below standard when judged by one or the other of the limits set up in the Sale of Milk Regulations, 1901, is 8.57; for the 12 months ended the 31st December, 1936, the figure was 13.58. In each case samples of genuine quality, but below standard, are included in the total number for the purpose of calculation, but reference and appeal samples are not included.

#### OTHER SAMPLES.

5. Samples of articles other than Milk submitted for analysis during the year were 40 in number, represented by 85 samples, which was 5 less than the number of other samples submitted during 1936.



With the exception of Bicarbonate of Soda and Cream of Tartar, these samples were all of foodstuffs or commodities used in the preparation of food, and apart from 1 sample of Shredded Suet, and 1 sample of Sausage, to which reference has been made earlier, they were all of satisfactory quality, and complied with their descriptions.

The largest number of any one article received for analysis was 11 Ice Cream, as was the case in 1936 when 14 samples of the same commodity were taken.

The nature and number of these samples submitted during the year is given hereunder :—

Almonds, Ground ..	3	Jam .. ..	1
Bacon .. ..	1	Lard .. ..	3
Bicarbonate of Soda ..	1	Lemon Cheese ..	1
Bread .. ..	1	Margarine .. ..	3
Butter .. ..	5	Meat Pie .. ..	1
Candied Peel .. ..	2	Oatmeal .. ..	2
Cheese .. ..	1	Pepper .. ..	4
Cinnamon, Ground ..	1	Polony .. ..	2
Cocoa .. ..	1	Potted Meat .. ..	1
Coffee .. ..	4	Raisins .. ..	1
Cornflour .. ..	1	Rice .. ..	1
Cream of Tartar ..	2	Rice, Ground ..	1
Currants .. ..	1	Sausage .. ..	3
Custard Powder ..	4	Spice, Mixed ..	1
Fish Paste .. ..	2	Suet, Shredded ..	5
Flour, Self-raising ..	3	Sultanas .. ..	1
Ginger, Ground ..	2	Tea .. ..	2
Ice Cream .. ..	11	Treacle .. ..	1
Icing Sugar .. ..	1	Vinegar .. ..	2
Infant Food .. ..	1	Yeast .. ..	1

Notice has been drawn in the report for the Quarter ending the 31st December, 1937, to the incidence of sampling, and reference to the above table only serves to emphasise what was said there ; it will be noticed that of 21 articles sampled during 1937 only 1 sample of each commodity was procured.

6. Apart from the above observations, the work of the past year has been of the usual character, and calls for no further comment.

(Signed) CYRIL J. H. STOCK.

31st December, 1937.

APPENDIX "E."

---

**VITAL STATISTICS.**

For the Year 1937.

---



## APPENDIX III.

**TUBERCULOSIS ORDER, 1925**

Summary of Quarterly Returns forwarded to the Ministry of Agriculture and Fisheries from January 1st, 1937, to December 31st, 1937.

Number of premises on which disease was reported but not confirmed by Veterinary Inspector		Number of premises on which disease was declared to exist by Veterinary Inspector		Total Number of bovine animals on premises (other than a market, fair, or saleyard)	Total number of animals examined by Veterinary Inspector	Total number of animals reported as diseased by Veterinary Inspector				Total number of cases in which diagnosis was aided by use of Tuberculin.	Total number of animals found to be affected on slaughter.					Total number of animals slaughtered and amount of compensation paid or payable					TOTAL SALVAGE After deduction of expenses incurred in and for purpose of salvage																														
						Tuberculosis of Udder	Giving Tuberculous milk	Tuberculous emaciation	Chronic cough and showing definite clinical signs of tuberculosis		A. Having Tuberculosis of the Udder.	B. Giving Tuberculous Milk and showing lesions of Tuberculosis.	C. Suffering from Tuberculous emaciation.	D. Affected, but not as in columns A, B or C.	E. Not Affected.	Full.	Three-fourths or 30/-	One-fourth or 30/-	Total Compensation paid																																
1.	2.	3.	4.																	5.		6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.													
55	213	..	..	Cows in milk	..	3690	..	3251	..	31	..	1	..	20	..	121	..	21	..	40	..	—	..	18	..	115	..	—	..	—	..	—	..	96	704	16	3	..	77	177	8	6	..	882	4	9	..	133	16	4	
		..	..	Other Cows or Heifers	..	2041	..	1410	..	4	..	—	..	21	..	21	..	12	..	5	..	—	..	21	..	20	..	—	..	—	..	—	..	28	145	2	6	..	18	29	10	0	..	174	12	6	..	22	8	4	
		..	..	Other Bovine Animals	..	6363	..	381	..	—	..	—	..	1	..	3	..	3	..	—	..	—	..	—	..	—	..	—	..	—	..	—	..	3	11	5	0	..	1	1	10	0	..	12	15	0	..	0	17	6	
TOTALS				..	12094	..	5042	..	35	..	1	..	42	..	145	..	36	..	45	..	—	..	40	..	138	..	—	..	—	..	—	..	—	..	127	£861	3	9	..	96	£208	8	6	..	£1069	12	3	..	£157	2	2



CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF CUMBERLAND, 1937.

CAUSES OF DEATH.			Sex.	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	
ALL CAUSES .. ..			M	576..	47 ..	13 ..	10 ..	13 ..	21 ..	17 ..	28 ..	46 ..	113 ..	152 ..	116 ..	909 ..	70 ..	7 ..	15 ..	8 ..	26 ..	27 ..	46 ..	65 ..	151 ..	238 ..	256 ..	
			F	527..	31 ..	5 ..	14 ..	12 ..	24 ..	19 ..	32 ..	36 ..	64 ..	118 ..	170 ..	794 ..	42 ..	9 ..	11 ..	9 ..	19 ..	25 ..	30 ..	69 ..	129 ..	193 ..	258 ..	
1 Typhoid and paratyphoid fevers .. ..			M	1 ..	—	—	—	—	—	—	—	1 ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			F	1 ..	—	—	—	—	—	—	—	1 ..	1 ..	—	—	—	—	—	—	—	—	1 ..	—	—	—	—	—	
2 Measles .. ..			M	3 ..	—	1 ..	2 ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			F	4 ..	—	—	2 ..	2 ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3 Scarlet Fever .. ..			M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 ..	—	—	—	—	—	—	
4 Whooping Cough .. ..			M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 ..	—	—	—	—	—	—	—	—	
			F	3 ..	1 ..	—	2 ..	—	—	—	—	—	—	—	—	—	2 ..	2 ..	—	—	—	—	—	—	—	—	—	
5 Diphtheria .. ..			M	1 ..	—	—	1 ..	—	—	—	—	—	—	—	—	—	2 ..	—	—	—	—	—	—	—	—	—	—	
			F	4 ..	—	1 ..	1 ..	2 ..	—	—	—	—	—	—	—	—	1 ..	—	—	1 ..	—	—	—	—	—	—	—	
6 Influenza .. ..			M	18 ..	1 ..	—	—	—	—	—	—	3 ..	2 ..	4 ..	7 ..	1 ..	36 ..	—	—	1 ..	—	—	1 ..	6 ..	3 ..	5 ..	13 ..	7 ..
			F	15 ..	—	—	—	—	—	1 ..	1 ..	2 ..	1 ..	2 ..	3 ..	5 ..	45 ..	—	1 ..	—	2 ..	2 ..	3 ..	3 ..	3 ..	8 ..	12 ..	11 ..
7 Encephalitis lethargica .. ..			M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			F	—	—	—	—	—	—	—	—	—	—	—	—	—	3 ..	—	1 ..	—	—	—	—	—	1 ..	1 ..	—	—
8 Cerebro-spinal Fever .. ..			M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			F	1 ..	—	—	1 ..	—	—	—	—	—	—	—	—	—	1 ..	—	—	1 ..	—	—	—	—	—	—	—	
9 Tuberculosis of Respiratory System .. ..			M	33 ..	—	—	—	1 ..	11 ..	5 ..	4 ..	7 ..	4 ..	1 ..	—	34 ..	—	—	—	—	4 ..	5 ..	5 ..	9 ..	5 ..	6 ..	—	
			F	29 ..	—	—	—	1 ..	14 ..	4 ..	5 ..	2 ..	2 ..	—	1 ..	27 ..	—	—	—	1 ..	8 ..	7 ..	4 ..	3 ..	2 ..	2 ..	—	
10 Other Tuberculous Diseases .. ..			M	7 ..	—	1 ..	1 ..	2 ..	1 ..	2 ..	—	—	—	—	—	11 ..	1 ..	—	3 ..	1 ..	—	2 ..	2 ..	2 ..	1 ..	1 ..	—	
			F	6 ..	—	—	2 ..	1 ..	1 ..	1 ..	—	—	—	—	—	11 ..	—	—	3 ..	—	5 ..	1 ..	1 ..	1 ..	—	—	—	
11 Syphilis .. ..			M	2 ..	—	—	—	—	—	—	—	—	—	1 ..	1 ..	—	—	—	—	—	—	—	—	—	—	—	—	
			F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12 General Paralysis of the Insane, tabes dorsalis .. ..			M	4 ..	—	—	—	—	—	—	—	—	1 ..	3 ..	—	2 ..	—	—	—	—	—	—	—	—	2 ..	—	—	
			F	1 ..	—	—	—	—	—	—	—	1 ..	—	—	—	1 ..	—	—	—	—	—	—	—	—	1 ..	—	—	
13 Cancer, Malignant Disease .. ..			M	65 ..	—	—	—	1 ..	—	—	1 ..	6 ..	21 ..	24 ..	12 ..	90 ..	—	—	—	—	—	3 ..	2 ..	9 ..	18 ..	37 ..	21 ..	
			F	52 ..	—	—	—	—	—	—	5 ..	7 ..	13 ..	14 ..	13 ..	102 ..	—	—	—	—	—	1 ..	8 ..	15 ..	21 ..	33 ..	24 ..	
14 Diabetes .. ..			M	7 ..	—	—	—	—	—	—	—	1 ..	2 ..	4 ..	—	11 ..	—	—	—	—	—	—	—	1 ..	6 ..	3 ..	1 ..	
			F	12 ..	—	—	—	—	—	—	—	1 ..	2 ..	6 ..	3 ..	14 ..	—	—	—	—	—	—	1 ..	6 ..	4 ..	2 ..	—	
15 Cerebral Haemorrhage, &c. .. ..			M	39 ..	—	—	—	—	—	—	1 ..	2 ..	6 ..	11 ..	19 ..	55 ..	—	—	—	—	—	—	—	—	—	—	—	
			F	50 ..	—	—	—	—	—	—	1 ..	4 ..	9 ..	17 ..	19 ..	58 ..	—	—	—	—	—	—	1 ..	—	5 ..	11 ..	22 ..	18 ..
16 Heart Disease .. ..			M	118 ..	—	—	—	1 ..	1 ..	—	3 ..	10 ..	30 ..	41 ..	32 ..	213 ..	—	—	—	—	1 ..	2 ..	—	5 ..	11 ..	41 ..	73 ..	80 ..
			F	128 ..	—	—	—	2 ..	1 ..	5 ..	7 ..	4 ..	17 ..	41 ..	51 ..	199 ..	—	—	—	—	2 ..	2 ..	5 ..	11 ..	33 ..	53 ..	93 ..	
17 Aneurysm .. ..			M	3 ..	—	—	—	—	—	—	—	—	—	—	—	4 ..	—	—	—	—	—	—	—	—	—	—	—	
			F	1 ..	—	—	—	—	—	—	—	1 ..	—	1 ..	—	2 ..	—	—	—	—	—	—	—	—	2 ..	—	1 ..	
18 Other Circulatory Diseases .. ..			M	37 ..	—	—	—	—	—	—	—	—	—	5 ..	19 ..	62 ..	—	—	—	—	—	—	—	—	1 ..	6 ..	26 ..	29 ..
			F	23 ..	—	—	—	—	—	—	—	—	—	5 ..	7 ..	53 ..	—	1 ..	—	—	—	—	—	—	2 ..	7 ..	19 ..	24 ..
19 Bronchitis .. ..			M	18 ..	1 ..	—	2 ..	1 ..	—	—	—	—	—	2 ..	3 ..	32 ..	3 ..	1 ..	2 ..	—	—	—	—	—	2 ..	5 ..	3 ..	15 ..
			F	19 ..	1 ..	—	2 ..	—	—	1 ..	—	—	—	5 ..	9 ..	18 ..	2 ..	—	—	—	—	—	—	1 ..	—	—	9 ..	
20 Pneumonia (all forms) .. ..			M	35 ..	7 ..	6 ..	1 ..	1 ..	—	—	2 ..	4 ..	4 ..	8 ..	2 ..	48 ..	12 ..	2 ..	3 ..	—	—	3 ..	1 ..	3 ..	12 ..	4 ..	8 ..	
			F	17 ..	3 ..	—	2 ..	—	—	—	4 ..	1 ..	1 ..	1 ..	5 ..	29 ..	3 ..	4 ..	4 ..	1 ..	—	2 ..	—	1 ..	6 ..	5 ..	3 ..	
21 Other Respiratory Diseases .. ..			M	7 ..	—	—	—	—	—	—	—	—	—	1 ..	4 ..	24 ..	—	—	—	—	—	—	3 ..	6 ..	5 ..	5 ..	5 ..	
			F	4 ..	1 ..	—	—	—	1 ..	—	—	—	1 ..	—	—	9 ..	—	—	—	—	1 ..	1 ..	—	4 ..	2 ..	—	1 ..	
22 Peptic Ulcer .. ..			M	8 ..	—	—	—	—	—	2 ..	2 ..	—	2 ..	1 ..	1 ..	7 ..	—	—	—	—	—	—	1 ..	1 ..	3 ..	1 ..	1 ..	
			F	2 ..	—	—	—	—	—	—	—	—	2 ..	—	—	5 ..	—	—	—	—	—	1 ..	1 ..	—	2 ..	1 ..	—	
23 Diarrhoea, etc. .. ..			M	8 ..	3 ..	2 ..	—	1 ..	—	—	—	—	1 ..	—	1 ..	4 ..	3 ..	1 ..	—	—	—	—	—	—	—	—	—	
			F	7 ..	3 ..	1 ..	—	—	—	1 ..	—	1 ..	—	—	1 ..	9 ..	2 ..	1 ..	1 ..	—	—	—	—	2 ..	1 ..	—	2 ..	
24 Appendicitis .. ..			M	1 ..	—	—	—	—	—	—	—	1 ..	—	—	—	3 ..	—	—	—	—	—	—	—	—	1 ..	1 ..	—	1 ..
			F	3 ..	—	—	—	1 ..	—	2 ..	—	—	—	—	—	3 ..	—	—	—	—	—	—	—	—	—	2 ..	—	
25 Cirrhosis of Liver .. ..			M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 ..	2 ..	—	3 ..	1 ..	
			F	1 ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
26 Other Diseases of Liver, &c. .. ..			M	2 ..	—	—	—	—	—	—	—	—	—	—	1 ..	1 ..	—	—	—	—	—	—	—	—	—	—	—	
			F	1 ..	—	—	—	—	—	—	—	—	—	—	—	9 ..	—	—	—	—	—	—	1 ..	—	2 ..	2 ..	3 ..	1 ..
27 Other Digestive Diseases .. ..			M	10 ..	—	—	2 ..	—	—	—	—	1 ..	—	2 ..	3 ..	19 ..	—	—	—	—	1 ..	3 ..	2 ..	—	1 ..	4 ..	3 ..	5 ..
			F	11 ..	1 ..	—	—	—	—	—	—	2 ..	4 ..	2 ..	1 ..	13 ..	1 ..	—	1 ..	—	—	—	—	—	—	5 ..	1 ..	5 ..
28 Acute and Chronic Nephritis .. ..			M	15 ..	—	—	—	—	—	1 ..	1 ..	—	2 ..	6 ..	2 ..	19 ..	—	—	—	1 ..	—	—	—	2 ..	1 ..	2 ..	9 ..	4 ..
			F	22 ..	—	—	—	—	—	1 ..	—	1 ..	2 ..	2 ..	10 ..	28 ..	—	—	—	—	1 ..	2 ..	1 ..	6 ..	12 ..	6 ..	—	
29 Puerperal Sepsis .. ..			F	1 ..	—	—	—	—	—	—	—	1 ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
30 Other Puerperal Causes .. ..			F	2 ..	—	—	—	—	—	—	1 ..	1 ..	—	—	—	—	1 ..	—	—	—	—	—	—	—	—	—	—	
31 Congenital Debility, Premature Birth, Malformations, &c. .. ..			M	33 ..	33 ..	—	—	—	—	—	—	—	—	—	—	42 ..	42 ..	—	—	—	—	—	—	—	—	—	—	
			F	20 ..	18 ..	—	—	1 ..	1 ..	—	—	—	—	—	—	25 ..	25 ..	—	—	—	—	—	—	—	—	—	—	
32 Senility .. ..			M	12 ..	—	—	—	—	—	—	—	—	—	4 ..	8 ..	47 ..	—	—	—	—	—	—	—	—	—	—	5 ..	42 ..
			F	32 ..	—	—	—	—	—	—	—	—	—	3 ..	29 ..	42 ..	—	—	—	—	—	—	—	—	—	—	2 ..	40 ..
33 Suicide .. ..			M	4 ..	—	—	—	—	—	—	—	1 ..	1 ..	1 ..	—	9 ..	—	—	—	—	—	1 ..	—	3 ..	3 ..	1 ..	—	
			F	—	—	—	—	—	—	—	—	—	—	—	—	2 ..	—	—	—	—	1 ..	—	1 ..	—	—	—	—	
34 Other Violence .. ..			M	27 ..	1 ..	—	—	3 ..	5 ..	1 ..	4 ..	4 ..	5 ..	3 ..	1 ..	45 ..	2 ..	2 ..	—	3 ..	11 ..	4 ..	8 ..	3 ..	9 ..	2 ..	1 ..	
			F	8 ..	1 ..	2 ..	—	—	1 ..	—	—	—	—	1 ..	3 ..	16 ..	3 ..	1 ..	—	1 ..	1 ..	—	—	—	3 ..	2 ..	4 ..	
35 Other Defined Diseases .. ..			M	46 ..	1 ..	3 ..	1 ..	2 ..	2 ..	5 ..	3 ..	5 ..	9 ..	7 ..</														







